

INS -- For Your Custom

# CAR CRAFT

4-12

APRIL 1957 25c



**HOT BLOWER!** V-4 #12  
**HOW TO GET MORE HORSEPOWER**  
**FROM McCULLOCH SUPERCHARGER**

**It's a fact, man...**

# RESTYLING and REPAIRING

is *Easy* with  
**TAP\*KITS!**



**TAPKIT C-10**

**ONLY \$3.95**

TAPKITS contain genuine TAPOX, the sensational new plastic that bonds fiberglass to metal like a weld job. Hardens tough as metal. Easy to apply. Easy to finish. These are the new "glassing" materials for "plastic surgery" on auto bodies you've been reading about in national automotive magazines.

TAPKIT C-10 contains 500 sq. in. special treated "A" weight Fiberglass cloth, TAPOX resin and hardener, milled Fiberglass fibres, thixotropic powder, mixing cups, spoons, brush and complete, illustrated instructions. This is the kit for beginning "glassers" and for small repair jobs or for minor customizing... **ONLY \$3.95 ppd.**

TAPKIT C-25 contains over four times more material. This kit is adequate for hooding headlights and more ambitious carcrafting... **ONLY \$12.45 ppd.**

TAPKIT C-50 is a "king-size" "glassing" kit. Ample for a complete fore-and-aft customizing job or for several professional repair jobs... **ONLY \$24.95 ppd.**

THE GLASSER'S MANUAL - New "how-to-do-it" book for beginning "glassers." Non-technical, fully illustrated. Contains over 60 step-by-step photos on hooding, frenching, finning, air scoops... **ONLY \$1.00 ppd.**

**SATISFACTION GUARANTEED!**

TAPKITS are guaranteed to contain more "glassing" materials per dollar than any other comparable kits on the market today!

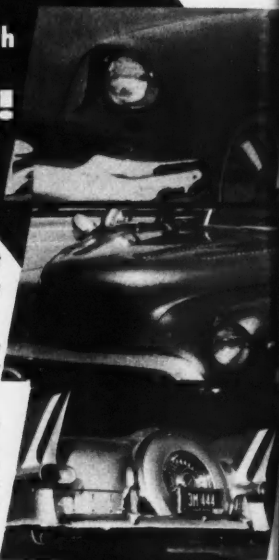
**Carcrafters... don't just dream about that way out custom**

build it yourself at home with TAP's new, low-cost carcrafting kits!

**WITH TAPKITS** you can hood your headlights, fin your fenders, put on an air scoop, patch dents and rust-outs on any auto body. No torch or expensive metal-working tools required. Beginners get professional results on their first jobs!

**AUTOMOTIVE  
SUPPLY JOBBERS**

Write today for the  
TAP Merchandising Plan.



**GET GOIN'  
MAN  
ORDER  
TODAY**

## \*Taylor & Art, Inc., Plastics

Dept. CC-4, 1710 E. 12th St., Oakland 6, California

\$\_\_\_\_\_ enclosed. Send the following immediately, postpaid.

- ☐ C-10 (\$3.95)    ☐ C-25 (\$12.45)    ☐ C-50 (\$24.95)  
☐ THE GLASSER'S MANUAL (\$1.00)  
☐ Send me my FREE copy of your 16 page, illustrated brochure: "CUSTOMIZING IS EASY WITH TAPKITS."

Name\_\_\_\_\_

Street\_\_\_\_\_

City\_\_\_\_\_ State\_\_\_\_\_

a  
ately,

4.95)

rated  
ITS."

50

100

5'  
JE  
FU  
30  
CO  
BI

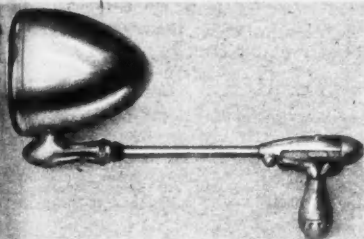
R  
br  
hun  
loc  
pa  
pic  
ref  
inu  
r d  
mly

2

APR



# WE HAVE A LIMITED SUPPLY OF THOSE POPULAR TEARDROP SPOTLIGHTS!



**5" SEALED BEAM LENS!  
JEWELER'S CHROME FINISH!  
FULLY ADJUSTABLE—  
360° TURNING RADIUS!  
COMPLETE WITH MOUNTING  
BRACKETS!**

Eastern Auto scoops the industry by bringing back the most popular spotlight of all time with custom enthusiasts!

We now have an exclusive supply of luxury-brand lights, designed to our own bullet-shaped specifications, that are the answer to every customizer's dream!

George Barris, famous custom designer and builder, not only endorses these Teardrops—he's installing them on his own custom dream-cars.

Mounts on windshield molding of cars with wrap-around windshields!

*Specify make and year of car*

**HURRY! WHILE THEY LAST \$22.50 each**



## California ROCKET-LITES

For all '52-'56 Fords and Thunderbirds. Genuine Olds "Rocket" lenses mounted on parking chrome, solid piece rims (no screws or nuts). Simple conversion in minutes—no cutting, welding, or drilling.

Only \$11.95 per set

## "DO-IT-YOURSELF"

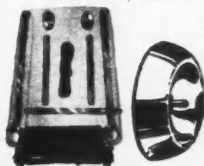
## X TENSION-BROWS



Now—give your fenders the stylish new '57 hooded treatment with these custom pre-formed heavy-gauge steel stampings! No cutting or alteration work. All you do is weld and paint!

Specify make and year:  
Chev. '49-'54. Ford '49-'51.

Only \$19.95 per pair



## PUSH-BUTTON WINDOW LIFTS

Genuine TRICO units for 2 windows. Lifts, switches, all parts. Ford '52-'55; Merc. '39-'55 (Specify) \$19.95 set

25% Deposit Required, F.O.B. Los Angeles, Postage C.O.D. Add 4% Sales Tax in California.



# CAR CRAFT

*The "Custom Car" Magazine*

Vol. 4  
Published Monthly  
No. 12

Editorial  
Director  
•  
Wally Parks

Photographers  
•  
Eric Rickman  
Bob D'Olive  
Al Palocz  
Colin Critz

Editor  
Managing Editor  
Art Director  
Asst. Art Director  
Production  
Advertising  
Ad Production  
Circulation  
  
Dick Day  
Bob Pendergast  
Al Isaacs  
Art Smith  
Yvonne Hull  
Tom Medley  
Dick Jones  
Gordon Behn

## Contributors

•  
Bob Hardoe  
Peter Sukolac  
George Barris  
Carl Kahler  
Walt Dibbles  
Neil Emory  
George Conry  
Joe Bailen

Publisher  
•  
R. E. Petersen

## features

CHARMED CHARIOT	12	Cover Car
MODIFYING THE McCULLOCH	16	by Don Francisco
FANCY FAIRLANE	22	'55 Ford Custom
FINS	24	by George Barris
DANDY DEUCE	32	Sanitary Streetster
RESTYLING THE '49-'51 FORD	34	by Stylers Custom Shop
AUTO SHOW ORGANIZATION	38	by Bob Pendergast
ACCESSORY OF THE MONTH	44	Revolutionary "Pin Stripes"
RESTYLING THE T-BIRD	46	Bird-watcher specials
GRAB BAG	54	'53-'54 Stude Grilles

## how-to-do-its

COLUMN SHIFT	50	For Early Fords
--------------	----	-----------------

## departments

SHOPPING AROUND	6	New Products
LETTERS	10	From The Readers
WHAT'S YOUR PROBLEM?	56	by Bob Pendergast
JUNIOR FLIP	58	by Carl Kahler
CUSTOM QUERIES	64	by Neil Emory

## cover

Norm Grabowski's much modified "T" roadster-pickup lends quite a radical touch to this month's cover. Radical, but racy, Norm's Cad-powered bucket is the envy of Southern California rodders — turn to page 16 and you'll see the reason.

Ektachrome by D'Olive

CAR CRAFT, U. S. Copyright 1957 by Petersen Publishing Company, 5959 Hollywood Blvd., Los Angeles 28, Calif. Entered as Second Class matter, Los Angeles, Calif. post office. SUBSCRIPTION RATE: U.S., U.S. Possessions, Canada — One yr. \$3, two yrs. \$5. Per copy 25¢. Other countries — One yr. \$4, two yrs. \$7. CHANGE OF ADDRESS: Give 3 week notice. Send name of magazine and address imprint from recent issue, or state how label is addressed. Send old and new address. ADVERTISING: Closes 65 days before deadline. Eastern Office, 1515 Book Bldg., Detroit 26, Mich. CONTRIBUTORS: Send self-addressed envelope. Not responsible for unsolicited material.



# SPECIAL INTRODUCTORY OFFER!

# 6

big  
issues  
of  
**CAR  
CRAFT**  
for:

# \$1.00



**FILL OUT THIS COUPON AND MAIL TODAY!**

**CAR CRAFT**

5959 Hollywood Blvd., Los Angeles 28, Calif.

*Here's my dollar! Send me CAR CRAFT  
for six months.*

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

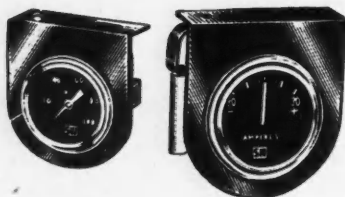
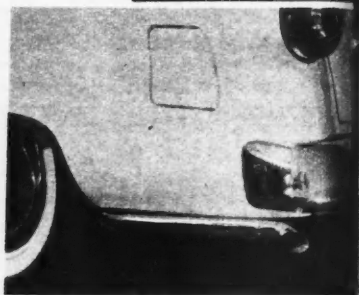
## SHOPPING



### CHROMED EXHAUST EXTENSIONS

Exhaust extensions are the latest accessory for the custom car. Many shapes and forms are taking place with special made pieces offered by various manufacturers. now available is this "Z" bent extension that

One of the most universal pieces blends perfectly with lower rear fender designs. Especially suitable for late station and ranch wagons. Write: Sonny's Muffler Shop, 501 E. Garvey, Monterey Park, California.



### NEW CAR GAUGES

Now available to replace the flashing red lights are the dial ammeter and oil pressure gauge. If you're not satisfied with the new system, these instruments are said to be easily installed. No drilling of holes necessary. Each gauge comes complete with mounting bracket and all necessary fittings. Ammeter, \$9.95.

Oil pressure gauge, \$11.50.

J. C. Whiney and Company,  
1917-FE Archer Ave., Chicago 16, Ill.

### RACING FUEL

This new additive is designed for the preparation of custom fuel blends by mixing with methanol, benzene or other mixtures.

It is a 100% commercial grade nitromethane in factory packed and labelled containers. Extreme caution must be used when experimenting. Available in 1 gallon cans at \$5.85 or 5 gallon drums at \$28.

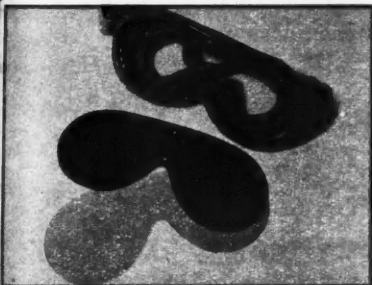
Commercial Solvents Corp.,  
Auto Specialties Dept., 260 Madison Avenue,  
New York 16, New York.





#### TRANSMISSION OVERHAUL KITS

For use on passenger cars equipped with Hydra-Matic transmissions. Each kit contains: friction discs, spacer plates, gaskets, front and rear clutch piston seals and expanders, front oil pump seal, reverse clutch piston seal and rear bearing oil seal. Parts which should be replaced when overhauled are included. For further information write: Raybestos Division, Raybestos Manhattan, Inc., Bridgeport, Conn.



#### NEW LIGHTWEIGHT GOGGLES

The latest foreign import plastic goggles, comes with 2 extra lens. Green and Yellow. Made of light weight plastic, these goggles come in small sizes suitable for 1/4 midget racing. Write: WEBCO INC., 19 E. Valley Blvd., Alhambra, California.

CONTINUED

## the Original FYBGLAS METAL REPAIR KIT



Repairs • Restores • Restyles

anything made of metal, wood, masonry, plaster. No leading, no welding, no soldering! Available at auto supply stores, hardware and mail order houses; or write for nearest dealer.

**SCHRAMM FIBERGLASS PRODUCTS, INC.**

Dept: CC, 3010 W. Montrose Ave.  
Chicago 18, Ill.

### JACKET EMBLEMS



#### LADY LUCK

For more info see

100-100-100-100

4" Felt Emblems ... 25

7" Felt Emblems ... 50

10" Felt Emblems ... 100

Decals available in same

sizes at the same price

Specify when ordering.

#### PERSONAL NAME EMBLEMS

and embroidered on Southern White Felt

Post Color ... 25¢

**SEND NOW**

for NEW completely

illustrated catalog emblems,

novelties and accessories— 25¢

P.O. Box 66

Culver City 13, Calif.

SPOT ENTERPRISES

LUDLOW  
1-5381

fringe...  
the  
Ultimate in

+HOOD and DECK #100  
*Finstriping*  
4616 FIRESTONE  
SOUTHGATE  
L.A. CAL  
(C.C. 4)



# WANTED

## MEN AND WOMEN

\$\$\$\$\$GROW MUSHROOMS. Cellar, shed. Spare, full time, year round. We pay \$3.50 lb. We have over 20,000 customers. FREE BOOK. Washington Mushrooms Ind. Dept. 281—2954 Admiral Way, Seattle, Wash.

### ATTENTION: CAR CLUBS!

#### NOW

is the time to form YOUR CAR CLUB. Only 4 or more auto enthusiasts—boys, girls, men and women needed to start a car club.

#### FREE!

SHELL'S TIPS ON FORMING A CLUB—with how to get started—an outline CAR CATALOG, OR CLUB PLATES AND EMBLEMS FOR '57. Contains decal, trophies, jackets, flag pins, car bands, and other car club accessories illustrated. How to order—prices—terms—etc.

#### HELP

if you need HELP in getting good used or new new CHEVY motor, power and speed equipment, etc. WRITE US YOUR NEED. We are shipping these motors and parts everywhere—right to your garage door—insured. Custom OHV motor installations in mail may now being done in our Los Angeles shops by pre-arranged appointment ONLY. Arrange a motor installation ahead by mail—WRITE TODAY!

SEND NOW! Please enclose 25c in coin or stamps to cover post age of Shell's 1957 car club catalog to

**SHELL MOTORS & AUTO PARTS**  
11726 Wilshire Blvd., CC-4.  
P.O. Box 25455, L.A. 25, Calif.  
Phone: GRamite 7-6283

## Why Just Tinker?



**I EARN MONEY AND  
GET EXPERIENCE AS  
I TRAIN AT HOME!**

## Be A Full-Time Top-Pay Auto Mechanic

It's fun to tinker with your car engine—but it's downright enjoyable to be a *full-fledged mechanic*! Yes, you'll like the nice work, the big pay, the bright future this field offers. Thousands of mechanics are needed. You can train to be one—at home in spare time. CTI Shop-Method training makes every step easy. You learn every phase of repair. *Diesel or Body-Fender Rebuilding* included at no extra cost. Make money in spare time as you learn by fixing cars for neighbors. Mail coupon for two free books. Act today!

### YOU GET A PROFESSIONAL TUNE-UP KIT



You quickly locate engine troubles with these essential instruments. Included are a Compression Tester, a Vacuum Gauge and Fuel Pump Tester, an Ignition Timing Light, and a steel case. You can practice as you learn!

### YOU GET QUALITY MECHANIC'S TOOLS

You also get this fine-quality set of mechanic's tools. These help you get experience while training, do spare time repairing for profit. Both Tune-Up Kit and Tool Set are yours to use—and keep. No extra cost!



### MAIL TODAY FOR 2 FREE BOOKS

#### Commercial Trades Institute

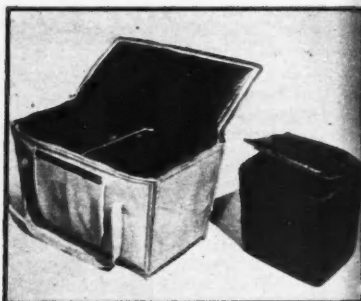
1400 Greenleaf Ave.  
Chicago 26, Illinois Dept. A-498  
Mail me 28-page book, "Big Money in Auto Mechanics." Also send Sample Lesson. Both FREE.  
Name \_\_\_\_\_ Age \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_  
Member National Home Study Council

## SHOPPING AROUND

continued

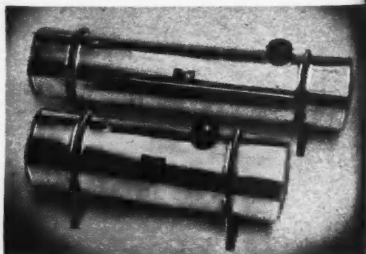
### SET FOR SALE

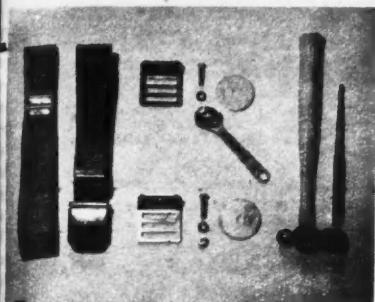
Soft, high-glass nylon webbing of Automotive Safety Associates belt claimed to withstand impact loads in excess of the 3,000 lb. minimum specified for aircraft belts by the Civil Aeronautics Authority. The buckle is reportedly designed for great gripping strength, but can be released in split second by one hand. \$125 includes fittings for installation postpaid. Automotive Safety Associates, 12145 National Blvd., Los Angeles 64, California



### COMPETITION CLUTCH

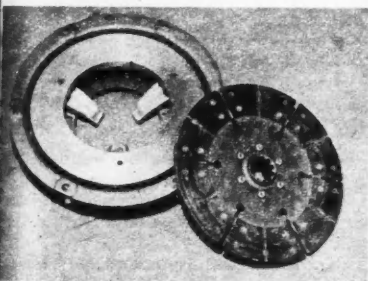
This competition clutch is claimed not to slip, to resist wear and not to explode. The pressure plate is made of cast manganese bronze. The clutch cover is a 10-inch 12-spring unit and is recommended for use with "Velvet Touch" clutch disc. Clutch cover, \$65, no exchange. "Velvet Touch" disc, \$21.25. Palamides Automotive, 574 West MacArthur Blvd., Oakland, California





### NAPPY TWO-TEMP BAG

One of the handiest articles to have around snack time at the local drag strip or weekend excursion — Nappy Two-Temp. Designed with two insulated compartments that will freshly keep hot food and cold items both at the same time. Bag is fashioned of leakproof Koroseal (washable) heavy brass zipper. Choice of seven colors. Price \$12.95. Write: Nappe-Smith Manufacturing Co., Southard Ave., CC Farmingdale, New Jersey.



### AUXILIARY FUEL TANK

These fuel tanks, manufactured from .040 thickness aluminum, Heli-arc welding, mount in luggage compartments of all makes and models of cars. Ideal for traveling into desolate areas, long non-stop trips or night driving. Also used for water in mobile homes. Available from 2 to 10 gallons, with complete installation instructions. Moon Automotive Equipment, Box 432, Santa Fe Springs, Calif.

# FREE!

228-page CATALOG—with 16 pages of last minute NEW items!



NEW  
LOW  
PRICES

THOUSANDS  
OF NEW  
ITEMS

1957  
EDITION  
JUST  
OUT!

### FIRST 1957 ACCESSORIES

Parts and Accessories for all makes and models of cars from 1920 thru 1957!

**Saves UP TO 50%**

on all parts for your car, truck, hot rod, custom car or station wagon—all models.

Get your FREE copy now . . . everything you need for your car, truck, custom styled car or hot rod. Save up to 50% buying-by-mail from Whitney! Thousands of hard-to-find items for cars from 1920 to 1957. See newest Hollywood accessories not offered in stores; high speed and power parts, custom styling equipment . . . all at lowest prices! Guaranteed satisfaction or money back. O r 20th year. Mail coupon.

#### RUSH COUPON

Please send 25¢ to help pay catalog mailing and handling costs. We will credit 25¢ on your first order for \$5.00 or more. Mail coupon NOW!



JUST A FEW OF OVER 75,000 ITEMS

J. C. WHITNEY & CO., 1917 C-4 Archer Ave., Chicago 16, Illinois

**Mail This Coupon Today!**

J. C. WHITNEY & CO., 1917 C-4 Archer Avenue, Chicago 16, Illinois

Rush giant 1957 catalog of auto parts and accessories at sale prices. I enclose 25¢ to cover part of mailing and handling cost, which will be credited to me on my first \$5.00-or-more order.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_



# SPEEDWAY

## 1/4 MIDGET\*

COMPLETE CAR READY  
FOR TRACK USE... \$495.



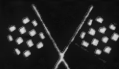
COMPLETE PARTS  
COMPLETE KITS

\$365.

Complete repair department.

Cars can be financed.

\* For further information and  
Free Brochure, write Dept. CC-4



SPEEDWAY

1/4 MIDGET MFG. CO.

13801 Vanowen Blvd., Van Nuys, Calif. 91411



FORD—MERCURY  
and CHEVROLET  
55-57 Models

Free Information  
See your dealer  
or write direct:

HEDMAN MUFFLER & MFG. CO.  
11839-49 W. Washington Blvd., Culver City 13, Calif.

## HYDRAULIC CLUTCH SLAVE CYLINDER KIT

For use with swing pedal installation.

Complete Kit  
as shown in  
Photo \$15.00

Postpaid.

(Bracket fits

'32-'39 Ford

only)

'39 Ford or

Later Kit Less

Bracket \$12.50

Postpaid.

Write or Call:

TIM'S PRECISION ENGINES

186 N. Klamath St., Pasadena, Calif. 91104

Dept. CC



# LETTERS

## PENN-STATE PLYMOUTH

Dear Sir:

Here's a couple of snapshots of my '48 Plymouth coupe. It has a shaved hood and trunk, skirts, and has been lowered 2". The smaller bars have been removed from the grille. Two Plymouth carburetors on an Offen-



hauser manifold, a head milled .065", and a pair of Fenton headers pumping into dual stock mufflers take care of the motive power. Hubcaps are from a '53 Plymouth.

— Marvin Metzler,  
Meadville, Penna.

We always did think those '46-'48 Plys could be made to look sharp, Marv. — Ed.

## LOW COST CUSTOM

Dear Sir:

For those who think customs are only for those with a fat billfold, I am enclosing a picture of my recently completed '49 Olds 88, with all modifications accomplished for approximately 55 or 60 dollars.

The hood has been dechromed and peaked; '55 Ford grille; GMC pickup front bumper;





standard wheel covers with '56 Mercury spinners; filled deck; '49 Buick taillights, mounted inverted; interior striping done by myself.

Except for the '55 Cadillac Bahama Blue paint job, all the work was done by my buddies and myself. Customs are gaining popularity here rapidly.

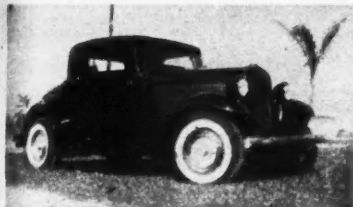
— Basil Craig  
Charleston, W. Virginia

You just can't beat "do-it-yourself" these days, Bos. — Ed.

#### OLDS-FIRED SAILBOAT

Dear Sir:

This is not the conventional Ford of the famed 1932 line, but a '32 Plymouth. The body was in exceptional shape when I bought it, and the 4.32 Plymouth rear end provides



pretty good dig—along with the 3 3/4" bore Oldsmobile V8 engine and '54 Hydramatic I installed.

The heads on this engine are milled .100", and it has a 4-barrel carburetor. When the car is parked in front of my home it never fails to draw a crowd, which is very heart-warming indeed.

— Jerry Montgomery  
Ft. Lauderdale, Florida

Let's say your "Ply" is a "gay deceiver".—Ed.

#### CHICAGOANS LIKE KOHLER

Dear Sir:

It is the decision of our club (faithful readers) that you continue the articles by Carl Kohler. We think he is the *most*. Of course, you may go down in sales a bit, but you can afford to lose 75¢ or \$1 from the few unsatisfied fellows.

— Igniters Auto Club,  
Gompers Park, Chicago, Ill.

## A '30 striping job for only \$4.95



### PIN-STRIPE your car in minutes!

No brush, no paint, no "beret" needed . . . PIN-STRIPE fenders, center of hood, corners of trunk lid . . . add beauty touches around door handles, gas filler cover, dash. Large sheet jammed with designs—easy to cut apart and arrange as you like. NOT painted sheets but super-quality decals—triple enamel striping will not chip, peel or fade. Ideal for bikes, motorcycles, outboard motors. State color: white or maroon striping. Send \$4.95 and we pay postage—or send \$1.00 and pay balance plus postage C.O.D. Calif. residents add 4% tax.

**NEWHOUSE AUTOMOTIVE INDUSTRIES**  
5805 E. Beverly, Dept. 696, Los Angeles 22, Calif.

### 1/4 MIDGET RACING HEAD

(For Continental Engines)  
Better cooling . . . higher compressor \$19.95 . . . 2 NEW TRACK RECORDS\* with EVANS HEAD.  
"LITTLE ASCOT" 7:73 Mike Olivero  
Upland, Calif. 8:21 Richard Shoji  
Special Racing Kit for Continental Engines  
Send 75¢ for 8x10 photo of "SHOJI BOMB" and literature.

**EVANS SPEED EQUIPMENT**  
2550 N. Seaman Ave., El Monte CC, Calif. FO 8-2286

WELD

BRAZE

CUT

SOLDER



4 WAY

\$14.75

WELDER

Complete with Twin Carbon Arc Torch and accessories . . . to handle all metal-craft work.

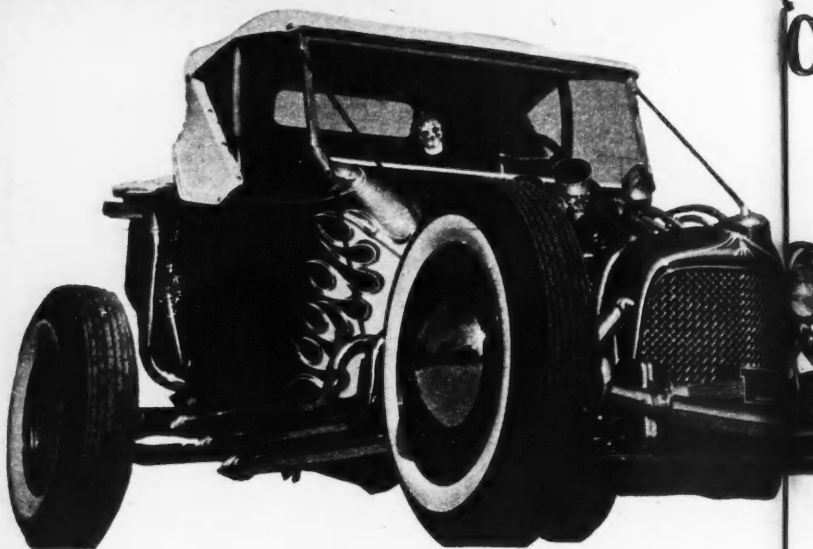
Acclaimed by thousands of stock, hot rod and customizing enthusiasts as the welder of 1001 uses. Easily operated from properly wired 110 volt AC or DC line. The ideal gift with a life-long use. . . Order today on 10-day money back guarantee.

Literature on larger equipment on request

**FOUR-WAY WELDER COMPANY**

1810 South Federal St., Chicago 16, Ill. Dept. F84-D

## COVER CAR



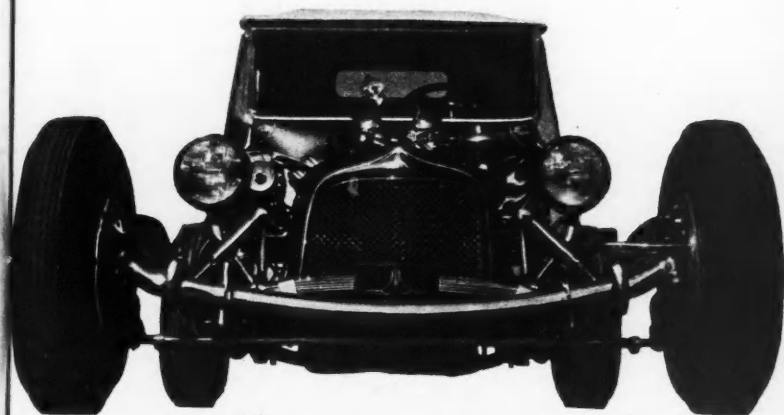
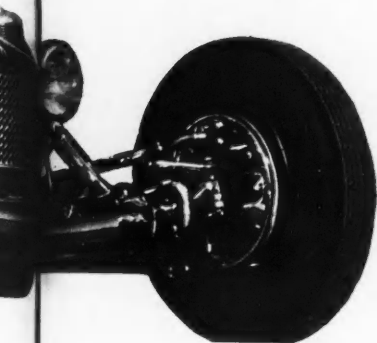
*Perspective of this shot makes pick-up bed on Norm's torrid "T" look almost normal in length; turn the page to the side-view to get the full effect. Pleated tarp conceals the bed's only cargo; the fuel tank. Taillights are '54 Buick; spring, Model A.*

# CHARMED CHARIOT

"T" bucket falls under the spell of Norm Grabowski—a rodder of wild imagination

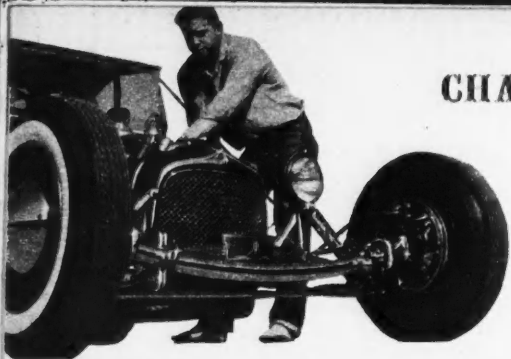
Photos by Bob D'Olive

*Sunland, California's Norm Grabowski has come up with a unique combination—most people aren't even sure what it is! The car in question is Norm's Cad-T—this was a '31 "A-V8" roadster when Norm got it five years ago. Dissatisfied with the motorcycles, customs and sports cars he'd owned, Grabowski used a torch for magic wand, and when the transformation was complete car shown here was the result.*



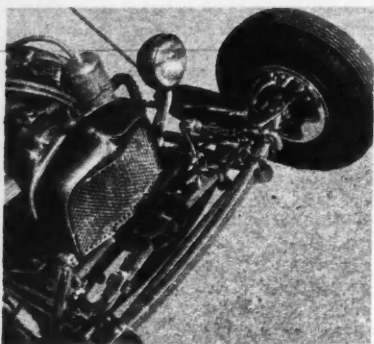
*Chrome-plated expanded metal fills the '32 Ford shell. Spring perches on tube cross-member, attaches to the '37 Ford tube axle via reversed '40 radius rods cut off and ground smooth, then plated. Dual upper and lower rods take the braking torque.*

CONTINUED



## CHARMED CHARIOT

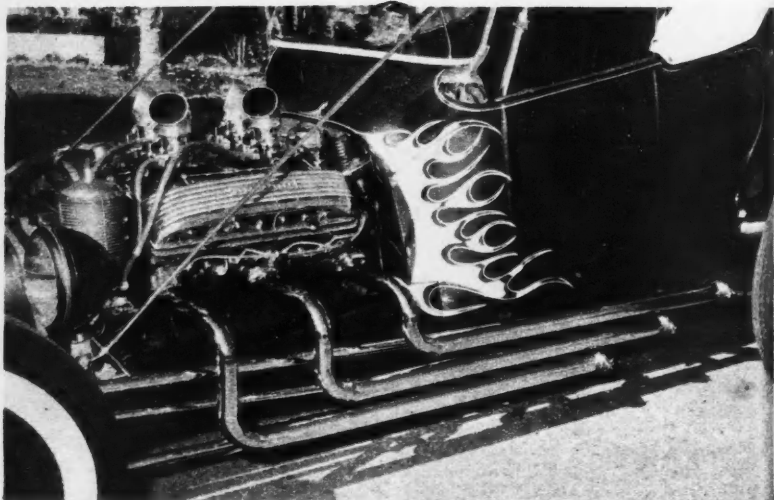
continued

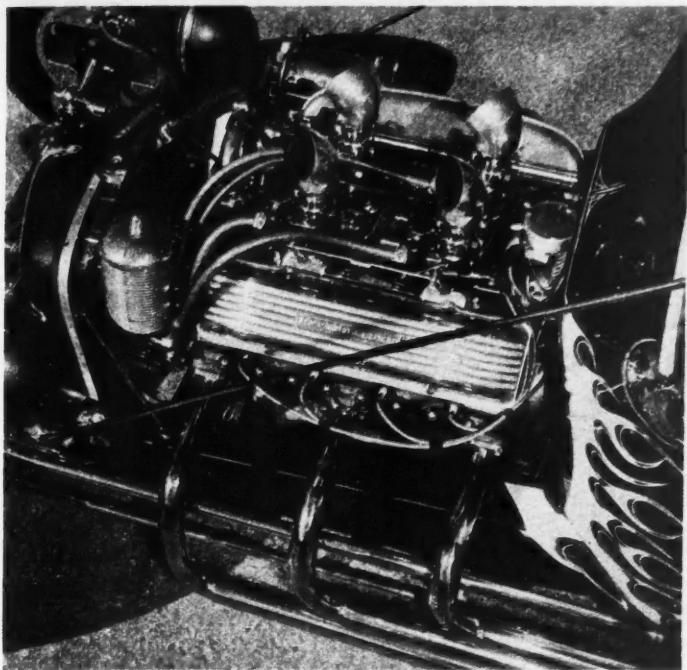


24-year-old Grabrowski is in the poultry business; credits buddies Ted Worobief and Tony Frenn for big assists on the construction and maintenance of the "T".

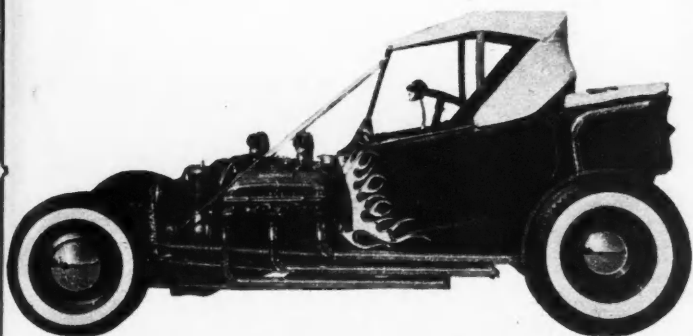
Tornado headlight brackets and Bell Auto steering arm make neat work of two items otherwise difficult for most builders. Norm reports the "T" rides better than you'd think for just a 96" wheelbase.

World's weirdest exhaust system is right in character. Each capped header has its own separate pipe leading underneath the car, into a collector, then into a 30" Huth glass-packed muffler. The steering is from a milk truck, has 2 1/4 turns travel.





*Horne manifold with four Stromberg 97's, Offenhauser valve covers, Jackson Roto-Faze ignition grace the exterior of '52 Cadillac bored out an  $\frac{1}{8}$ " to 3-15/16" for a total of 354 Cubes. Winfield 7111 cam grind works through collapsed lifters, shortened pushrods and Studebaker rockers for high revs.*



*First sortie to the drags resulted in time of 103 and a shattered '39 Ford gearbox. LaSalle transmission is slated for early installation. Upholstery by Tony Nancy and striping by Jeffries gave the finishing touches to the "T".*

# MODIFYING THE McCULLOCH

Photos by D'Olive, Greitz

A HOTTER BLOWER  
FOR TOWN OR TARMAC

PHOTO



1  
a  
s  
i  
c  
n  
n  
a  
p  
n  
p  
o  
m  
d  
e  
p

sp  
sp  
o  
p  
th  
cr  
w  
sp  
w  
go  
a  
fe  
fo  
th  
aw  
tro  
all  
me  
lin  
eli  
mu  
Th  
ov

UL  
sen  
ius  
rol  
Ca  
wi  
RI  
Me  
fue



**H**OT RODDERS ARE "DOERS." Maybe you've noticed this. If something doesn't suit them, they change it. Take the McCulloch supercharger, for instance. The blower unit itself is fine for the mild supercharge application for which it is designed but the original system between the blower and the intake manifold does have room for improvement; also, for operation over the maximum design pressure, a change is in order in the drive mechanism. In recent months each of these problems has been attacked in earnest by a couple of fellows, each with his own aim in mind. The results have been good. One of these projects is now in an advanced stage of experimentation and the other has been completed to a practical fulfillment.

The McCulloch has an automatic variable-speed drive mechanism that controls the speed of its impeller according to the load on the engine and governs its maximum output to five pounds. Under low load conditions the blower impeller takes it easy and doesn't create any pressure boost in the cylinders but when the engine is working hard the impeller speed increases and the blower begins to work. Although the variable speed idea is good for a street engine it isn't necessary for a competition machine, and many of the fellows who buy a McCulloch want to use it for competition. The only bad thing about the variable-speed mechanism is that once in awhile some clown will disconnect its control so that the blower will run in high gear all the time. When this is done the drive mechanism's automatic governor effect that limits the blower's output to five pounds is eliminated and the output rises to the maximum it is possible for the blower to create. This is fine for engine performance but it overloads the planetary friction drive arrange-

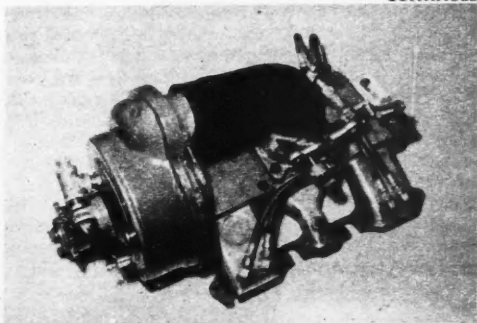
ment that turns the impeller. In many instances the drive mechanism wears out quickly under this treatment because it is not designed to carry the load the high output pressure places on it and then expensive repairs are in order if the blower is to be used any more. This failure isn't the fault of the blower but of the guy who tamps.

The modification aimed at providing a more durable impeller drive mechanism for continuous high pressure output is the most drastic of the two projects mentioned and it is the idea of Howard Johansen (Howard's Cams) of Los Angeles. Howard replaces the entire McCulloch drive mechanism with a positive gear unit that can't slip regardless of the air pressure created by the impeller. The gear drive is of the planetary type, consisting of a ring gear, a sun gear, and three pinion gears. The ratio of the gearset is 6 to 1, meaning that the impeller rotates at a speed six times faster than the shaft that drives it. This is somewhat higher than the 4.4 to 1 step-up provided by the stock planetary drive. The final step of Howard's conversion toward a completely positive drive is the use of a single-row roller chain, similar to the type used on bicycles, to rotate the blower's driven shaft. The nature of this conversion makes the blower unsuitable for any but competition use because of the noise of the gear drive and the chain. In a competition machine the gear and chain noise is music that is added to the roar of the exhaust and the squeal of the spinning tires and it doesn't matter but in a passenger car the noise would be more than the average fellow would stand.

Howard uses the impeller and impeller housing of a stock McCulloch for his conversions but replaces the standard drive housing with a much smaller one of his own. This

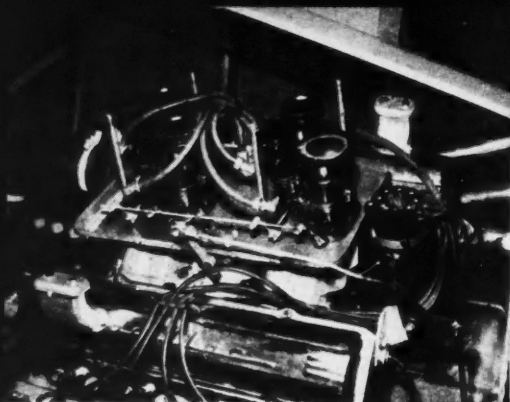
CONTINUED

**UPPER LEFT:** Howard Johansen giving Don Francisco the inside story of his blown Chevrolet. **LEFT:** Cisco looks over California's hottest ski boat with its owner Rudy Ramos. **RIGHT:** Howard-converted McCulloch with one version of fuel injection described in story.



## MODIFYING THE MCGULLOCH

continued



*Edelbrock 4-carb manifold used in Ramos' boat with base plate, linkage, fuel lines of Morco Engineering enclosure in place. Four studs hold top for total airtightness while in operation.*

*Aircraft fuel pump is just ahead of battery in Ramos' boat—supplies Howard-converted McGulloch mounted on "C" shaped bracket visible in upper left-hand corner of this photograph.*



not only reduces the overall length of the blower but makes it much lighter as well. The planetary gears in his experimental models now in operation are out of some model of inertia starter for an airplane engine but when the units go into production he will have his own gears made.

At the present time two of the conversions are in use. One of those now running is on Howard's '55 Bel Air Chevy that he runs at the drags. To date the car's best time is 112.77 mph for the quarter-mile, on gasoline. This is pretty fast for a car that runs in the sedan class, as some of you may know.

The Chevy has a few other modifications that help it go as fast as it does and they may be of interest to you—they were to me. Its engine was bored an eighth of an inch and stroked  $\frac{1}{4}$  of an inch to increase its stock  $3\frac{3}{4}$ -inch bore and 3-inch stroke to  $3\frac{7}{8}$ -inches

and  $3\frac{3}{4}$ -inches. This increased the engine's displacement from 265 to 306 cubic inches. The cylinder heads are stock, with the exception of being ported, and they are used with three head gaskets to drop the compression ratio down to about  $8\frac{3}{4}$  to 1. The exhaust system consists of a pair of Hedman headers and short lengths of straight pipe that run back to a point a couple of feet behind the transmission. The cam, of course, is a Howard, and the igniter is a Scintilla Vertex magneto. A floor-shift '38 Packard transmission has held up fine and the final drive is through a Hudson rear axle assembly with 4.59 gears and locked differential. Rear tires are 8.20 by 15 Firestones. A pair of torque arms clamped to the rear axle housing by the spring U-bolts prevent the springs from winding up on acceleration.

The blower is driven by a 24-tooth sprock-



*Special ring and sun gears replace standard McCulloch drive mechanism in blowers converted for all-out racing by Howard.*

et on the crankshaft and a 20-tooth sprocket on the blower. With the 6 to 1 step-up in the blower itself this gives a total ratio of 7.2 to 1 between the crankshaft and the impeller in the blower. At 6000 rpm crankshaft speed the impeller is rotating 43,200 rpm. The variable-speed pulley on a stock McCulloch has a maximum ratio of 1.7 to 1 which, when combined with the 4.4 to 1 step-up in the impeller drive, gives a total ratio of approximately 7.5 to 1 when the drive is in high ratio. However, when the output of the blower reaches a pressure of five pounds the drive ratio drops so this pressure will not be exceeded. In the Howard conversion the ratio of 7.2 to 1 remains constant regardless of engine speed and output pressure as long as the ratio between the crankshaft and the blower's driven shaft remains the same.

The blower outlet is connected to the large, single air inlet of a constant-flow fuel injector of Howard's design. This particular injector is unique, however, in that it also has a Stromberg 48 carburetor to feed the engine at idle and normal driving speeds. The carburetor is mounted on the rear of the injector casting and it is operated by the same throttle linkage that operates the butterfly valve on the injector. The throttle linkage is so arranged that the carburetor valves open first and then after considerable throttle movement the injector valve opens. When the blower cuts in and creates a positive pressure in the injector passages a valve under the carburetor is forced closed so fuel won't be blown out of the carburetor. Then this cat goes!

With the blower and injector setup on an

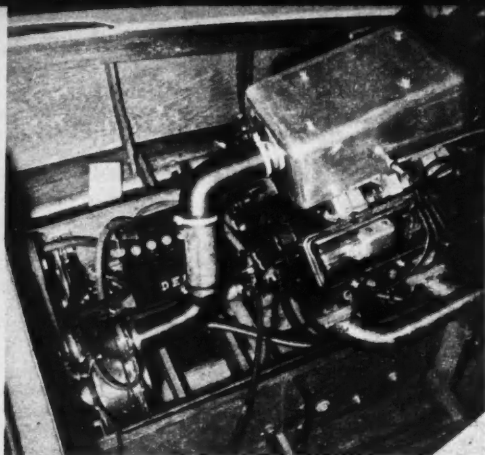
otherwise stock Chevy engine of 265 cubic inches the same car ran 105 in the quarter-mile. The stock engine developed 250 horsepower on Howard's dynamometer, compared to 300 from the stroker. This gives some idea of the power it takes to make a car go a little faster in the quarter after it once passes the hundred mph mark. As far as the horsepower gain from the blower is concerned, on the stroker engine it boosted the output 65 horsepower with nine pounds boost. This is net horsepower at the flywheel, over and above the power it takes to turn the blower. It takes quite a bit of an engine's power to turn a blower that is putting out a high pressure but this is a necessary evil that can't very well be eliminated without providing another source of power to run the blower.

The second converted blower now in operation is on the '49 Cadillac engine of a ski boat that belongs to Rudy Ramos, of Gardena, Calif. With the blower, the boat will show 80 mph on its speedometer just about any time, and this isn't bad either. This blower is the same as the one on Howard's Chevy but it is driven by a 27-tooth sprocket instead of a 24-tooth because Rudy doesn't turn the Cad as tight as Howard does the Chevy. At the maximum of 4800 engine rpm the impeller is turning 38,880 rpm. With this sprocket combination the manifold pressures are 2 pounds, gauge, at 2000 engine rpm and 9 pounds at 4800. This boost allows the en-

**CONTINUED**

*When completely assembled, Howard converted McCulloch appearance differs from stock only by sprocket replacing pulley.*





## MODIFYING THE McCULLOCH

continued

*Ramos' Cadillac engine with Morco enclosure, Howard-converted McCulloch installed. Note long extension shaft needed to drive blower, fuel pump, water pump. Drive extends beyond blower into "V-drive" gearbox, then back to prop through watertight stuffing box.*

gine to develop an additional 100 horsepower, as measured on Howard's dynamometer, over its unblown output. After we got started on this article Rudy changed the sprocket on the blower to a 16-tooth and boosted the impeller speed to 48,600 rpm at 4800 engine rpm. This change improved the boat's acceleration noticeably and boosted the maximum manifold pressure to 12 pounds.

The Caddy has been bored an eighth of an inch to  $3\frac{15}{16}$  inches but it still has its stock stroke of  $3\frac{3}{8}$  inches. It has Olds pistons, which drop the compression ratio from what it normally would be with the overbore because their compression height is  $\frac{1}{8}$  of an inch lower than that of Cad pistons. The cyl-

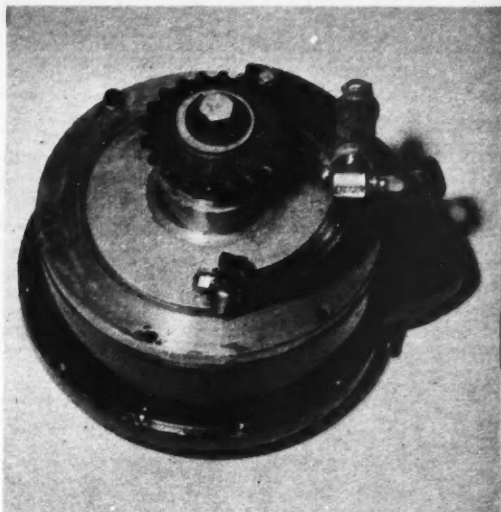
inder heads are off a '55 engine and the only alterations made to them consisted of cleaning out their ports. The camshaft is a Howard "F5" with mushroom tappets. A Scintilla Vertex fires the mixture in the cylinders.

The carburetion setup now on the boat differs from the one on the Chevy in that it has four Stromberg "48" carburetors instead of an injector. The carburetors are mounted on an Edelbrock manifold. The success of this installation is due in no small part to the second of the two projects mentioned previously. This improvement makes it possible to pressurize the entire carburetors instead of merely forcing air into their air horns. This is done by covering the carburetors with a

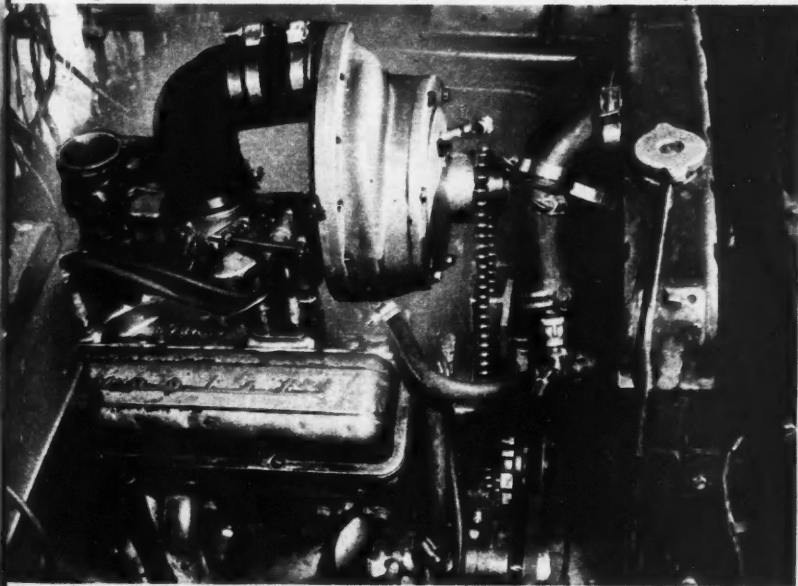


*Stock McCulloch impeller housing cover is used in Howard-converted blowers. Close inspection reveals gradually increasing cross-section of duct formed by cover and housing when bolted together. This converts velocity of charge into pressure for boost, which may be as high as 12 pounds.*

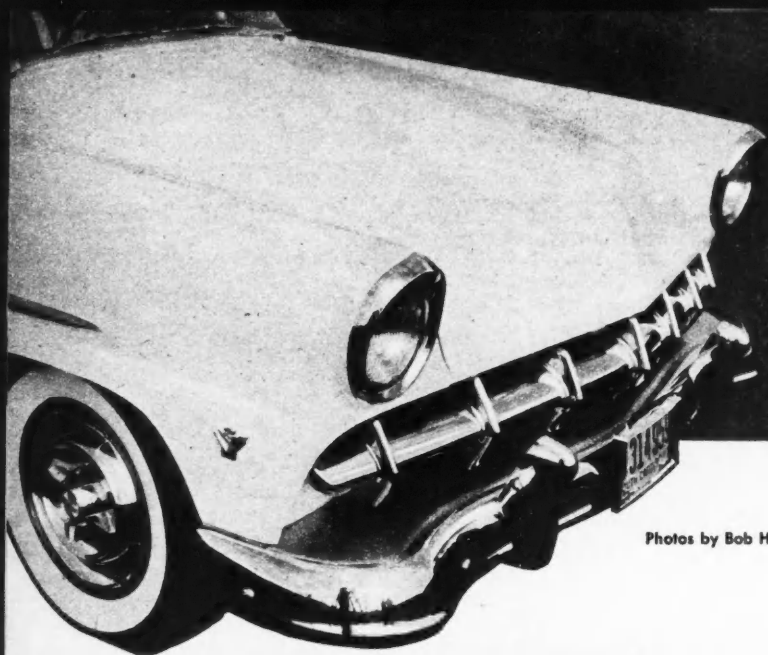
Howard drive assembly for McCulloch shown installed. Use of aluminum for material in this casting greatly reduces weight of the unit. Positive chain drive to sprocket is required by additional power used by blower to turn higher rpm's.



One-off type installation in Howard's '55 Chev has single "97" for low-speed, zero boost operation. Automatic valve seals off carb when blower and injector cut-in.



CONTINUED ON PAGE 60



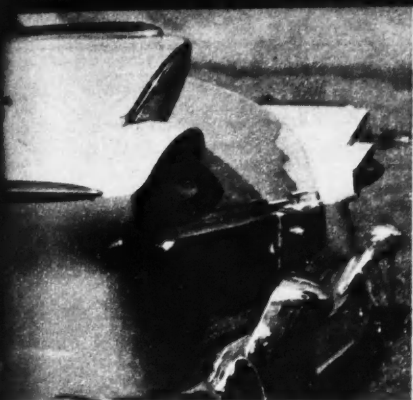
Photos by Bob Hordes

## FANCY FAIRLANE

'55 models lend themselves to inexpensive customizing







Taillights have been extended some three inches. Housings have been solidly molded to fenders, a special shade incorporated, then '56 Oldsmobile lenses adapted in the deep cavities. Backup light is retained.

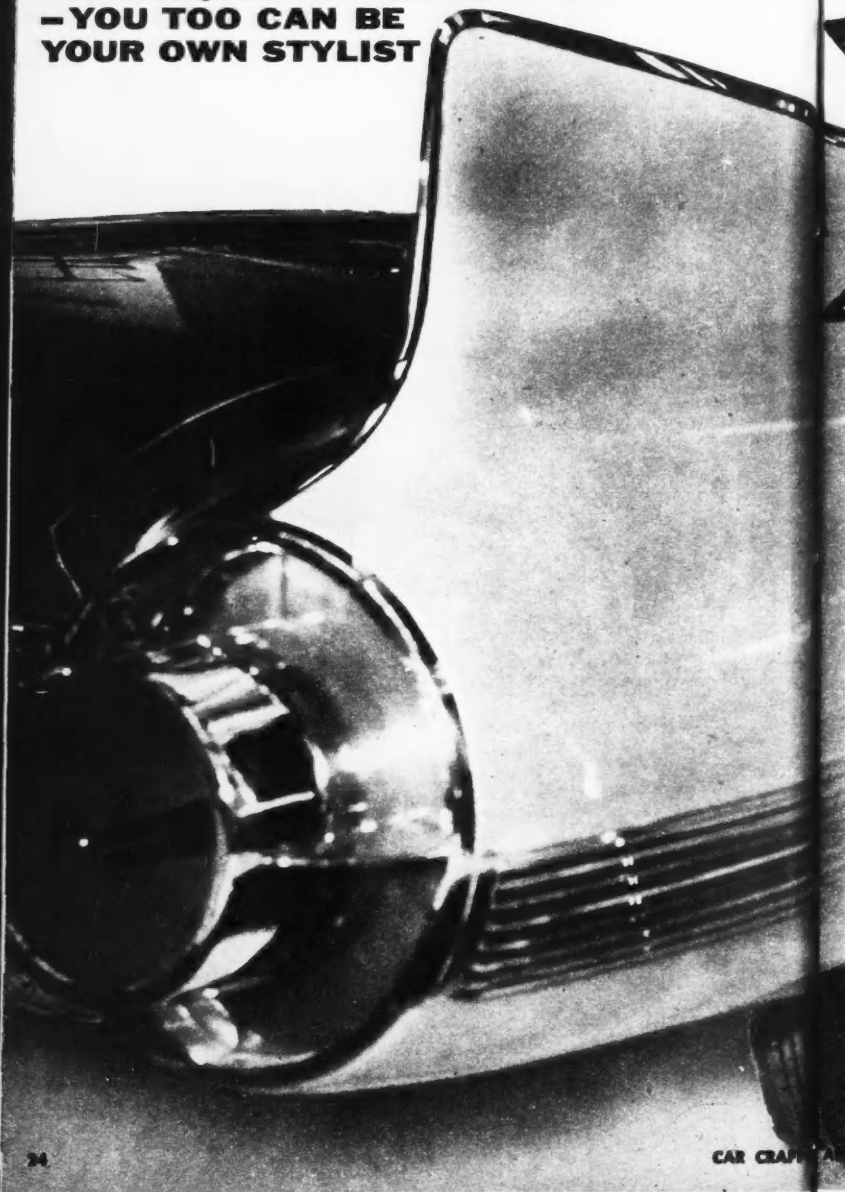
Clever airscoop effect was created just forward of rear wheel openings with special sheet metal fabrication. Scoop's design mates with stock trailing body contour. Note trim protruding from scoop opening.



Robbie Martinez of Broadway Custom Shop is credited with torch capers on Jerry Moree's late '55 Ford club sedan. Novel two-tone side treatment was a natural after once adapting the universal '55 DeSoto side trim. Chrome lip of grille opening was discarded and edge finished off neatly. Cavity now houses reworked '54 Chevy grille assembly. Stock headlight rims were removed and replaced with '56 Oldsmobile frames. Hood chrome was also removed for standard custom appearance. Ford's body has been lowered four inches both fore and aft. Exterior color is combo of Sierra Gold and white. Two Chev grille bars were spliced together to fill Ford's elongated grille cavity. Note ends have been capped and filled, then assembled completely rechromed for one-piece look.



**"JET AGE" STYLING IS DETROIT'S RECENT  
INNOVATION. WITH THE LATEST CUSTOM  
TECHNIQUES AND MATERIALS  
-YOU TOO CAN BE  
YOUR OWN STYLIST**





# FINNS

By George Barris

JUST ABOUT EVERY body shop and backyard *Farina* in the country has climbed on the "fin" bandwagon in an effort to equal (or out-do Detroit?) in that new jet-tailed appearance for their particular customized product. It's not an entirely new styling kick for some of the more prominent body shops have been incorporating fins in a minor degree on many of their so-called *way-out* creations for some time. But for the backyard customizers — there seems to be no limit as to what constitutes well designed fins in relationship to the over-all appearance of the car, as compared to a set of dorsal type protrusions that somehow transform his automobile into a "space station".

The innovation of rear fender fins is a thing of beauty indeed. Many of the one-of-a-kind experimental models and '57 products such as Chryslers, Fords and Cadillacs bear-out this thought. But a close look at any one of these cars will reveal the element that the fins were designed with, a harmonious over-all appearance in mind and not just attached to the rear fenders as futuristic ornaments.

On the following pages you will find several elements pertaining to the newly popular fin theme. A pictorial section portrays some of the more legitimate "rudder" effects that have already been created by customizers. You will also note that the new fiberglass-to-metal material plays an equal part to that of sheet metal fabrication. And a late entry is a pre-cast fiberglass fin destined to become very popular as an accessory item for the Chevrolet and Ford products. Our designer-illustrator, Bob Cadaret, also gets into the act with a few universal suggestions along the fin line, and the salon is made complete with a how-to-do-it on building a set of fins for your own car. We do not profess to be connoisseurs of the rear fender fin, and so have set forth every example that our files would yield. The choice of design—style—and appearance, is up to you.

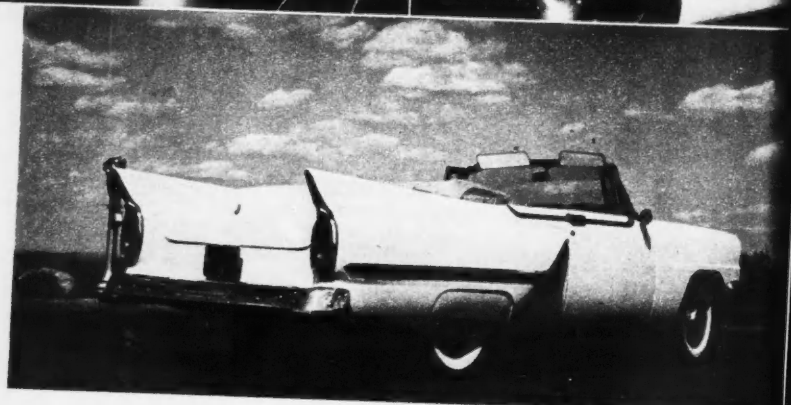
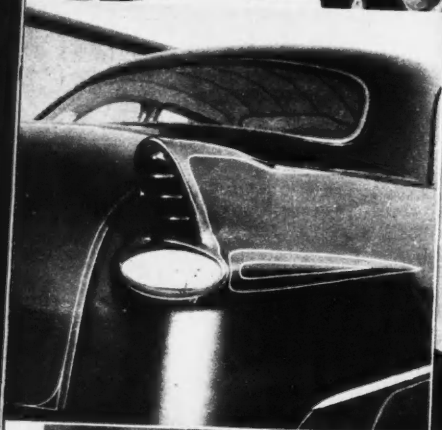
CONTINUED



# FINS

BE  
YOUR OWN  
STYLIST

continued



S

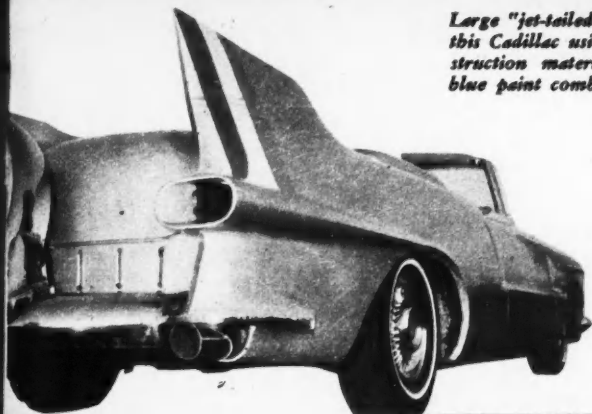
BE  
VN  
ST

and

RAFT



*Large "jet-tailed" styling was lent to this Cadillac using fiberglass for construction material. Red, white and blue paint combo is a radical touch.*



**TOP LEFT •**

*Displayed is new fiberglass fin for all '49-'51 Fords manufactured by "Plastic Surgeon". For information write: Box 338, Tustin, California.*

**CENTER RIGHT •**

*'55 Plymouth taillights were used to create kickup for this rear fender. The decorative pin striping augments special custom work to finish this job.*

**LEFT •**

*Heavy emphasis on sculptured appearance is found at the rear fenders on this model. Size of the fins blend well with over-all styling of the car.*

**FAR LEFT •**

*Small novel fins were incorporated on this '49-'51 Ford using lens from a late Buick for kickup. Stock lenses have been converted to backup lights.*

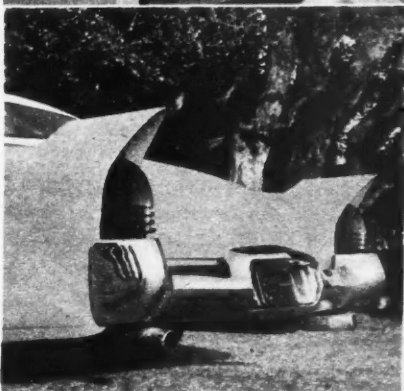
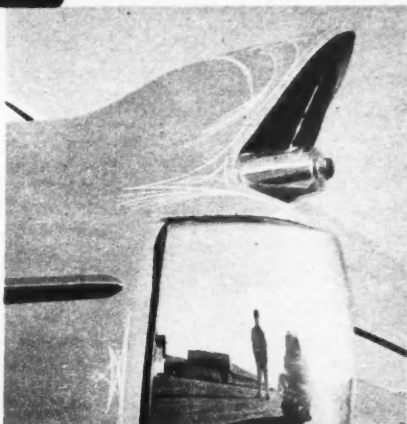
**LOWER LEFT •**

*Late Merc takes on undated styling with rakish fins. Fins can either be fabricated from sheet metal or constructed from versatile fiberglass.*

**LOWER RIGHT •**

*Fiberglass built, these stark designed fins lend a very futuristic flair to the rear of this late model Lincoln. Deep cavity design is a popular styling.*

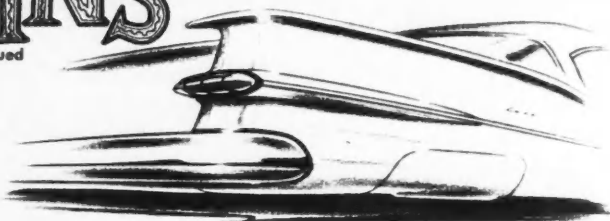
**CONTINUED**



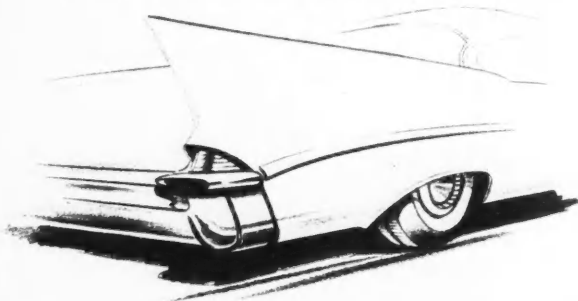
# FINs

continued

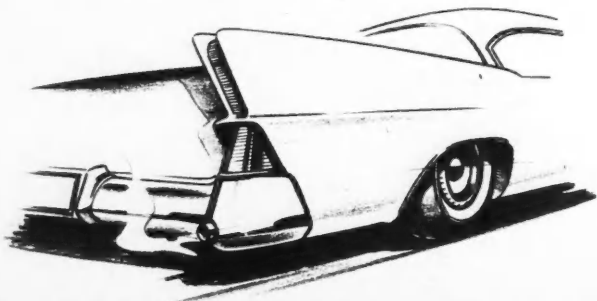
ORIGINAL DESIGNS BY BOB CADARET



*Fin designs know no boundary; here illustrator Cadaret has incorporated a flat motif into the rear fender harmonizing very well with windsplit housing containing taillight.*

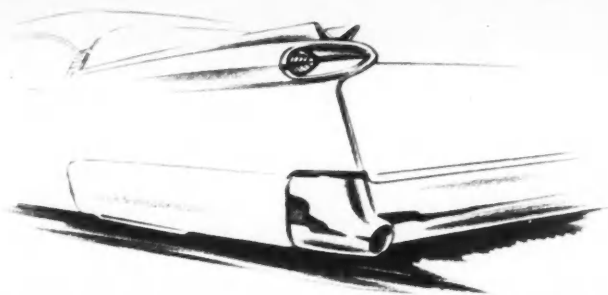


*A very stylish treatment is this sweeping fin design that allows the taillight lens to be tunneled in lower extremity. This fin would be a natural for late Chevrolets.*



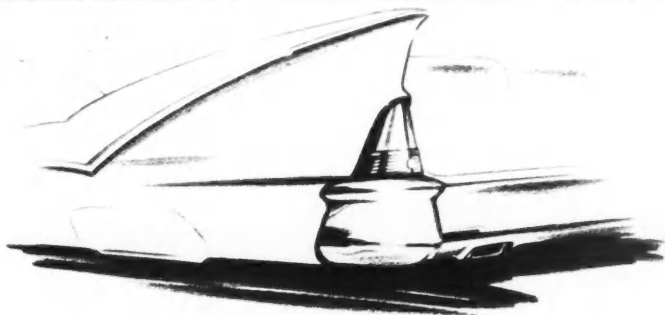
*A unique presentation of taillight lenses is found in this dual bladed fin design. Combination taillights prove very functional. Note shade built over the lower lens.*

ARET



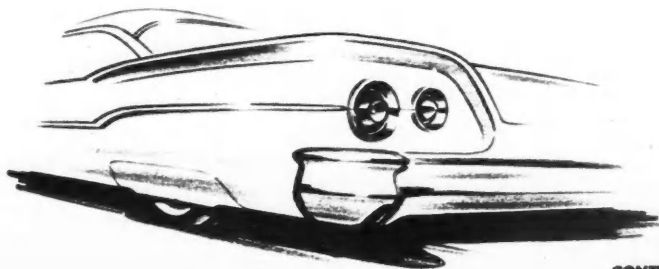
motil  
light

*With small bubble type lens recessed along outer edge of fender, fin carries a small V'd design that diminishes into knife-edge extension which borders the fender line.*



lens  
oleit.

*Quite an elaborate fin kickup is found in this novel arrangement. Notice that the side trim plays a major role with fin's design. Taillight lens again is tunneled slightly.*



CONTINUED

ign.  
ens.

*Concaved paneling carries this rear fender fin theme. With dual lenses deeply tunneled into body panel, fin circles area returning to lower gravel shield just behind bumper.*

BE YOUR OWN STYLIST

# FINS

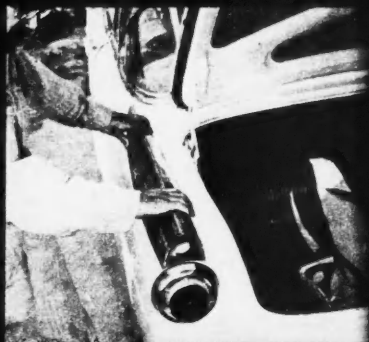
continued



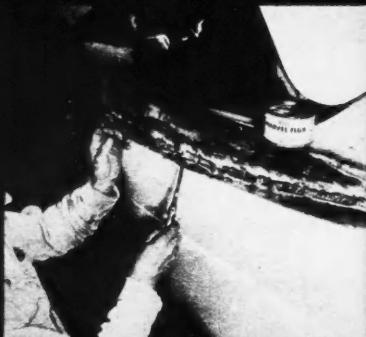
1. Late Ford ('55-'56) backup light attached determining amount of kickup



2. Once backup light is taped to the lens, make a cardboard template of fin's shape.



3. Template is used to make up duplicate metal fin shown here. Note rear bulkhead



4. Spot brace fin into fender position, then brace the fin solidly to the fender.



5. Grinder is used to smooth the surface. Thoroughly clean all the brazed areas





6. Tin surface, then apply lead, spreading it evenly on surface with lead paddle.



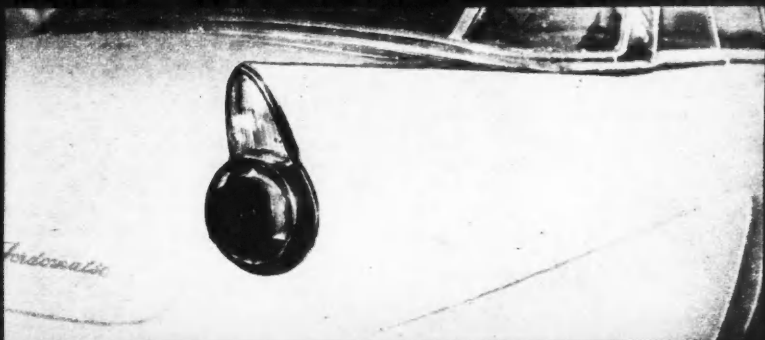
7. Surface is now brought to perfection by filing working area with a vixen file.



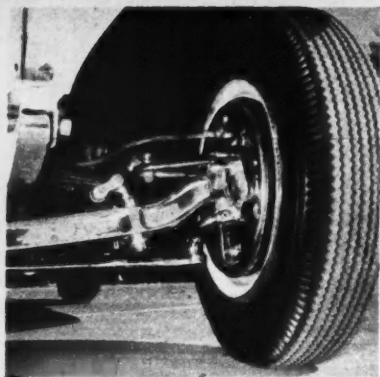
8. Blocksand surface thoroughly, featheredging painted areas. Apply metal prep.



9. Wipe metal prep from surface, then prime. Blocksand again, then apply paint.



Finished job lends a neat fin treatment. Car used for the story is '52-'54 Ford, but this type of fin arrangement is universal and would fit many makes and model cars.



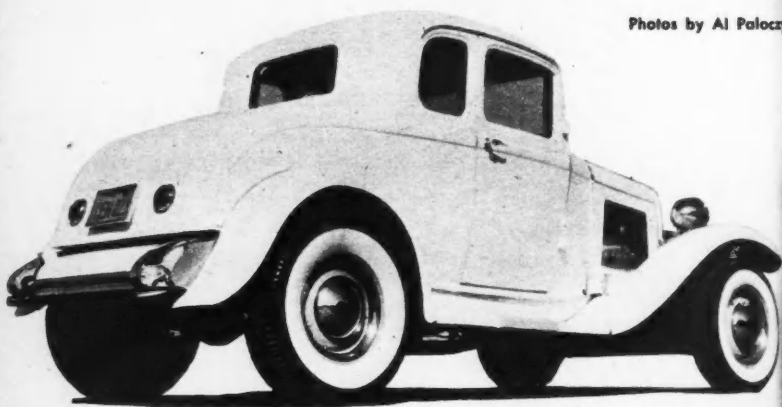
*Ford '48 brakes and 15" wheels team with Firestone 6.40:15 tires. Bell Auto steering arm used on '46 Ford spindles, brakes.*



*Ivory naugahyde with blue diamond insert beautifies trunk. Taillights are Pontiac. Deck lid was filled-in for a custom look.*

for two young brothers,  
what could be better than a -  
**DANDY DEUCE**

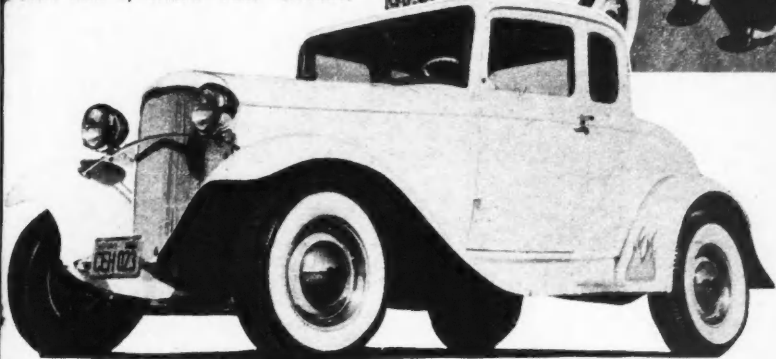
Photos by Al Poloczny



*Purchased a year ago, the Collins brothers' '32 Ford five-window coupe has undergone extensive alterations since they took ownership. The entire underside of the car is black lacquer with a hand-rubbed finish. Chromed radius rods, backing plates, brake lines, steering linkage, oil pan, starter, all contribute to the car's strong eye appeal.*

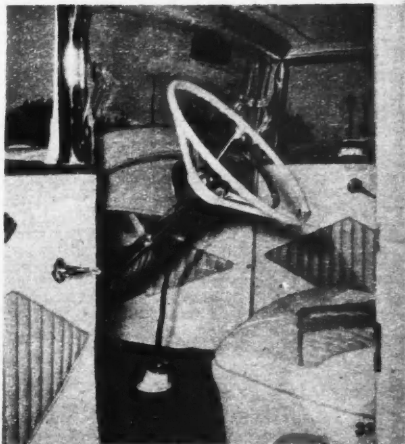
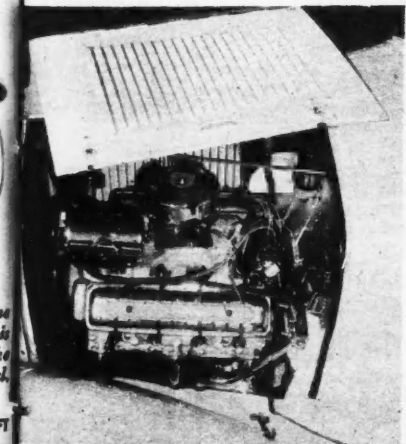
*Dick and George Collins hail from Whittier, California, where George attends college, Dick upholsters cars. Their Deuce is one of the area's best.*

*India Ivory enamel job is set-off by blue grille, rear-fender flames, and wheels. Plain small-diameter chrome hub caps are popular accessory item. Note lack of drastic "rake" attitude.*



*Engine compartment gleams with chrome, including home-made headers. Hildebrandt adaptor eased installation of the '56 Olds.*

*Interior as well as trunk was upholstered by Dick Collins, in same blue and white theme. Steering wheel is from '56 Ford.*



**S**TRANGE THINGS BEGIN to happen when you start blending '56 and '57 components to the popularly styled '49-'51 Ford club coupe. For the first time in recent years the small club coupe takes on an updated appearance, achieved only in the past by major metal surgery. Carroll Gentry, owner and operator of Stylers Custom Shop of National City, California, is this month's torch man and creator of the coupe's innovations.

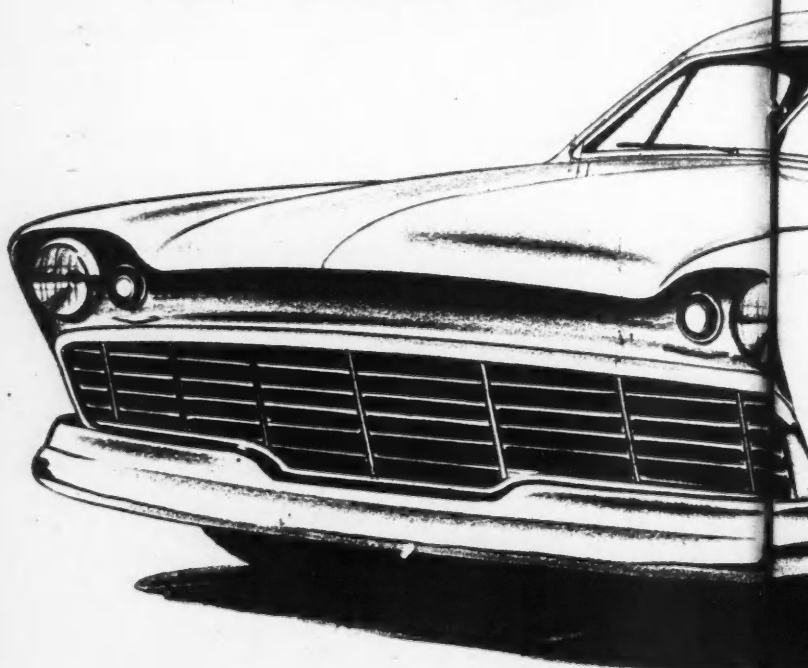
#### **BODY MODIFICATIONS**

Holding true to semi customizing, the body



*Carroll Gentry*

## **STYLER'S CUSTOM SHOP RESTYLES THE '49-'51 FORD**



was left completely intact except for the modification of side trim and removal of door handles. Lower trim spear emanates from a '55 DeSoto while the top piece bordering the two-toned paint job originates from a '56 Ford. Fender wheel openings also take on a new look with semi-elliptical contours similar to styling originated by Oldsmobile in '55.

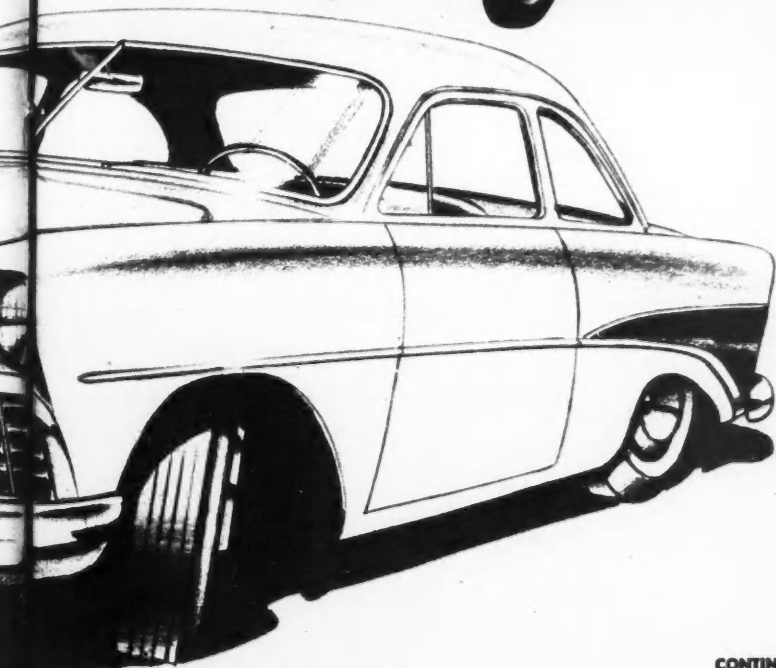
#### HOOD, GRILLE AND HEADLIGHT MODIFICATIONS

Carroll came up with the current "forward sweep" for frontal styling by combining a '57

Ford grille assembly and bumper with concaved paneling that contains stock headlights and '55 Buick parking lights. Concaved paneling necessitated shortening hood some six inches and reworking the forward area of the hood flat to strike off with the panel's contours. Fenders were also reshaped considerably and now offer a shaded effect to headlights. Late Ford front bumper was shortened to fit Ford's narrow width minus bumper guards.

#### REAR FENDER AND TAILLIGHT MODIFICATIONS

The taillight and rear fender treatment is



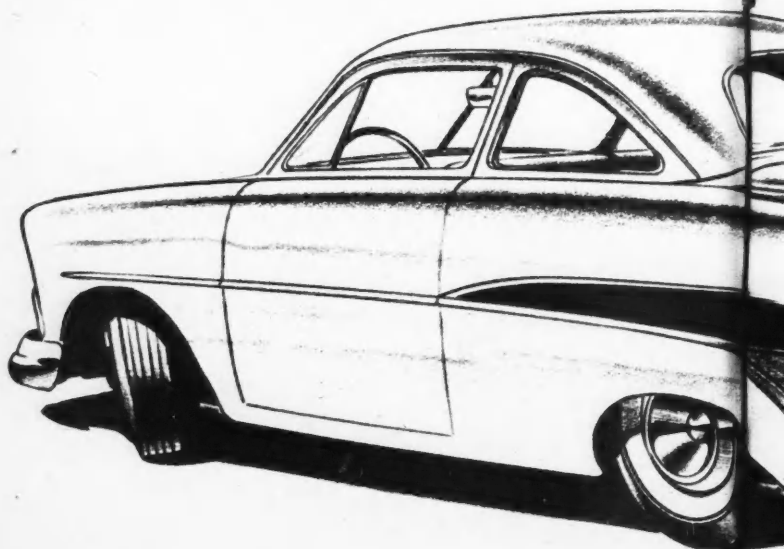
CONTINUED

## '49-'51 FORD RESTYLE continued

one of the coupe's more interesting features. Employing the novelly designed taillight lens from the '57 Mercury, Gentry transposes dream car appeal to the stock fenders. Concaved top sections are now blended to the frenched Merc lenses with fenders lengthened some ten inches. Note that the sculptured rear fender line is unaltered at the lower gravel pan

level. Kaiser bumper guard augments rear bumper appearance and serves as a functional exhaust tip housing. Deck lid trim has been removed to customizing standards and body of car lowered a conservative amount.

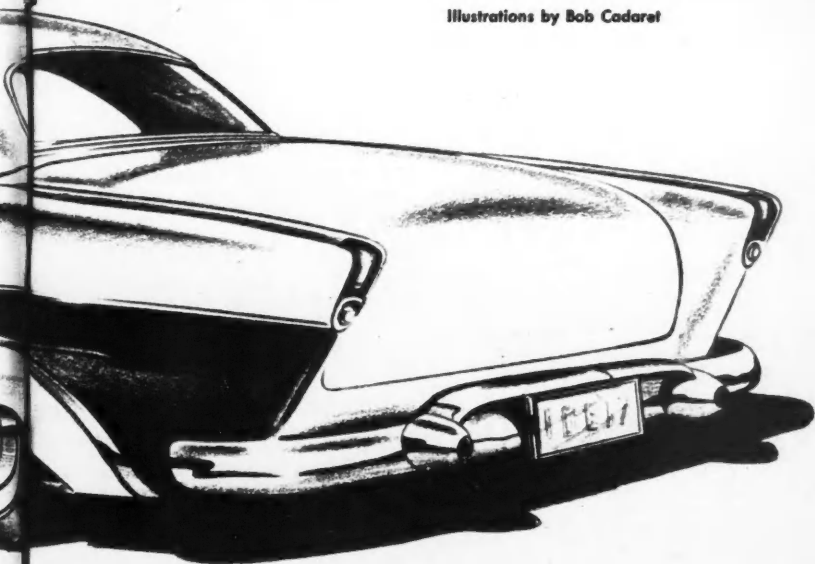
Carroll's new concept for restyling the '49-'51 Ford serves as handwriting on the wall for other models that are sure to follow. With



a brand new set of tools ('56 and '57 components) to work with, custom shops will be giving many of the recent customizing classics such as '49-'52 Chevrolets, '52-'54 Fords and Mercs, new faces and appearance—the new look in customizing about to take place.

PARTS AND PRICE LIST		Labor	Parts
Shorten and reshape hood, front fenders and install parking lights ('55 Buick)		\$250.00	\$ 30.00
Install grille and front bumper ('57 Ford)		75.00	57.50
Install side trim ('55 DeSoto-'56 Ford)		50.00	46.60
Reshape front and rear wheel openings		50.00	7.50
Remove door handles and install electric push button system		40.00	20.00
Reshape rear fenders and french taillights ('57 Merc)		200.00	8.30
Special bumper-exhaust tips (Kaiser bumper guard)		15.00	10.00
Lower both front and rear moderately		25.00	
Remove trim from deck lid and install electrical push button system		20.00	
Two-tone paint (Enamel)		85.00	
		\$750.00	\$179.90
		179.90	
		<b>TOTAL</b>	<b>\$929.90</b>

Illustrations by Bob Cadaret





# AUTO SHOW ORGANIZATION

By BOB FENDERGAST



conclusion

Photos by D'Olivo, Rickman

**A**S PROMISED in the first article of this two-part series (March '56 CAR CRAFT) we'll attempt to show in this concluding installment how an auto show should actually take place. Let's suppose your organization of the various committees necessary to proper show organization proceeded according to plan, and that they've managed to fulfill their respective tasks sufficiently to bring you right up to within a few days of show time.

## PUBLICITY

By now, your promotion Committee will have gotten out posters announcing the show to speed shops, muffler shops, custom body shops, drive-ins frequented by the rod and custom crowd, etc. These announcements

should include the name, date, time and place of your show, as well as more detailed information on the number of trophies to be awarded, laying particular emphasis on the Club Participation Trophy, as this one award will be responsible for bringing in a large share of your entries. Posters may be obtained in quantity at wholesale prices from printing firms specializing in this type of work. Most of them have stock designs already made up, with just the name, time and place to be added. These firms are to be found in any of the larger cities, and a club can usually save quite a bit of money on their advertising budget by working with them.

Posters are not the only avenue to be explored by your Promotion Committee, how-

ever, as newspaper and radio publicity is the prime method of attracting spectators to any event. Posters are tremendously effective in getting entrants, if properly placed, but newspaper space is a must. Your Promotion Committee can hire a professional photographer for a nominal fee—have him take pictures of some of the more "jewel" cars in your club posed in a show-like setting, perhaps with a few trophies for props. A shot of your club officers mapping out the floor plan of your show using the hood of a rod or custom for a desk is surefire material for your local paper. Remember, a good write-up in even a weekly publication devoted to happenings in your particular area is far better than no publicity at all in a big metropolitan daily. Contact the City Editor of your local paper, in person, and explain what your club is trying to do in your community. Tell him about your forthcoming show, and go prepared—take the photos you've had taken, along with a Fact Sheet giving full information about the show and your club. Be brief, because Editors are always busy, but make sure everything he'll need to know is down in writing, included in the material you give him. Go see him well in advance of the show, so that the situation doesn't become one of him having to cram something in the paper at the last minute. Follow these simple recommendations and you'll get the write-up you need.

The same basic format can be followed in regard to radio publicity—especially if there's a disc jockey broadcasting to your area who

specializes in so called "young people's music". If your Special Events Committee has been on the ball, you should have some type of supplementary entertainment for the show lined up that will be good for some additional publicity just before the event.

### QUEEN CONTEST

Queen Contests are hard to beat for this sort of thing—if you've got a service club for a co-sponsor on the show, they'll be able to tell you all about how to run a competition of this nature.

In case you don't here's a brief capsule run-down on how it's done; you announce in the local papers (through the personal efforts of your Promotion Committee going down there and talking to the City Editor), that you're having a contest to select "Miss Autorama" (or whatever you decide to call your "queen"). Then as entries in your contest are received, the names of the new entrants can be released periodically, thus giving your show several consecutive "breaks" in the papers. During the show, the final judging will be completed, giving you one final item of news to work with—the name of the ultimate winner. You can include the information on class winners, number of cars entered, estimated spectator attendance, etc., in this final release, insuring that full results on your show will not go unpublished.

### SPECIAL EVENTS

The queen contest should not be considered the only type of Special Event that

CONTINUED

*Late Buick being judged here is good example of "Mild Custom" class entrants—no special bodywork or upholstery to speak of, but with a different appearance achieved through special paint and wheel discs.*



## AUTO SHOW continued

would be suitable for your show. One Southern California club arranged for a National Guard detachment to set up a helicopter on display, while another group had several Quarter Midget race cars on a baseball diamond adjacent to their show grounds. A drum and bugle corps, weight lifting exhibition, judo school display, all have been used successfully. The Church Bazaar is always good. The opportunities are limited only by the imagination of the Special Events Committee — it's up to them to come up with something that will be an asset to your show.

Other committees should be in full swing at this stage of the game. Your Finance Committee is doling out the necessary funds to the other groups; the Facilities Committee may be making a last-minute double check on the availability of the public address system you'll use; the Competition Committee is making up a floor plan of where the cars will be parked on the basis of entries so far, and your Awards Committee is sweating out the arrival of the trophies they've ordered.

### AWARDS

A word on Awards would not be amiss here; too many groups miss the boat by ordering trophies and/or trophy engraving at the last minute and then end up giving their class winners a handshake and a sick smile when the trophies don't arrive in time for the show! To avoid this type of devastation you must begin soliciting award donations at least two months in advance of show day. Many pitfalls can be encountered when purchasing trophies for the first time. Price, quality and service should be your sole aim. There are many companies that specialize in car club activity and offer legitimate club discounts. These we highly recommend. If you live in a remote area where the local sporting goods or jewelry store is the only outlet for trophies, then approach them with a club discount proposition; they too recognize the club discount business pattern, and will generally make price allowances. Car Clubs affiliated with National Hot Rod Asso-

ciation already enjoy these discount benefits inasmuch as the Association has its own trophy supply service which provides bonus savings for the members. This is the job of your Awards Committee, and they should jump right on it the minute your Competition Committee lines up the classes you'll be using at this particular event. In addition to first, second, and third place trophies for each of the classes you elect to use, two ultra-special trophies should be set aside for the Sweepstakes Award and Club Participation Trophy, and about a half-dozen "Special Awards" should be on hand. The Sweepstakes Award goes to the car judged "Best in Show" regardless of class, while the Club Participation Trophy goes to the car club



*Immaculately restored early Plymouth roadster typifies Street Hot Rod Class entries which may or may not have hot mills.*

having the largest number of cars entered. The Special Awards are just in case; it seems that never a show ends that the sponsor don't wish they had a little extra something they could present some deserving contestants that almost, but not quite, made it into the winners' circle. They need not be expensive, as the circumstances under which they're given give them an intrinsic value, but they should be something that the recipient will be proud to display. Wall plaques or smaller cups are the most often used Special Awards; a walnut plaque with a gold plate engraved with the words "Special Award" followed by the name, date and place of the show is also

very nice. Use your own judgment about the selection, but don't leave out the Special Awards — you'll need them.

### SOLICITING TROPHIES

Getting together an impressive array of trophies for a full slate of classes is often enough to break the back of a club's treasury — good trophies will run from \$5 to \$15 apiece, and you should award three in each class scheduled. Simple arithmetic tells us that this can easily run into figures ordinarily used only by astronomers! But there's really no need for this to be a stumbling block; you've just got to get someone else to pay for your trophies.



*Turnout to compete for Club Participation Trophy always results in colorful display of club uniforms, trophies won previously.*

Although that may seem easier said than done, it's being accomplished many times weekly, as car clubs throughout the nation conduct their shows using donated awards. Just stop and think of the business firms in your community that derive part or all of their income from the automotive-conscious public — every one of them is a prospect for your Awards Committee's campaign.

The way you go about soliciting trophy donations has a lot to do with your success — or lack of it. Just popping into a new car dealer's show-room and asking one of the salesmen if he'd like to give you ten dollars for a trophy is *not* the way you get the job

done. You must talk to the head man, to start with; and present the idea to him on the basis of his firm making an award at your show *in the firm's name* as an advertising investment — which incidentally is tax deductible, another nice point for you to bring up. Make it clear to your prospective donor that none of the hassle of actually selecting and purchasing of the trophies will be left up to him; the club will do all of that and also pay for the engraving on the awards themselves. All the donor is required to do is simply pay for the trophy bearing his firm's name. This means that each of the trophies awarded at your show will have a name, such as the "Joe Smith Tire Service Award", and should be announced this way at the time of presentation. But more about that later — right now let's get your Competition Committee squared away.

### CLASSIFICATION

Getting the entrants in your show segregated into the proper classes simply can't be done properly unless the class structure you're using is suitable for the types of cars you're most likely to attract. You know the kind of cars you have in your area, and in the surrounding vicinities from which you're liable to receive entrants. If you expect very few all-out custom cars, but a great preponderance of street hot rods, then it wouldn't be at all smart to have six full custom

classes and only one street hot rod category. The reverse of this may just as easily be true, so start looking at the modified cars in your community in a different light — consider them from the standpoint of potential entries that will properly expect to be classified.

First of all you should consider whether or not you'll need a Competition Class. Unless there's a drag strip within easy driving distance of your town, you can let this one go by, although some cities lacking a drag strip do have a professional oval track nearby which could result in your picking up a few all-out race car entries. In any case, cars in the Competition Class should live up to their name — only machines that are never driven except in competition should be included.

CONTINUED

## AUTO SHOW

continued

*Queen Contest winners at recent show display distinctive togs and badges needed to separate entrants from spectators thus encouraging widespread voting.*

**FAR RIGHT** • *Competition Class entry displays trophies won at drags, other shows; is good example of type car usually attracted to this show class.*



The Roadster Class is always a good bet—hot rodding's spread in recent years has been such that hardly any area is devoid of its roadster quota. In direct contrast to the Competition Class, cars admitted to the Roadster Class must be street-driven vehicles primarily, although many of them may be regularly used for competition.

Probably one of the largest classes at any auto show is the Street Hot Rod Class, composed of coupes and sedans. Entrants in this division are usually pre-war machines that have been restored to a glory they didn't originally possess in the paint, chrome and upholstery departments, and may or may not have modified engines.

Telling the difference between a Street Hot Rod Class competitor and one that would fall into one of the Custom divisions can sometimes be difficult, but since the entrant's main concern is making a good showing, you can't miss if you put him where he'll do best, or let him choose between them himself. If the car in question has greater emphasis placed on engine modification than custom bodywork, then the Street Hot Rod Class is for him. But if there's more lead than load involved, he'd be better off in the Semi-Custom Class without a doubt.

Mild Custom is the name of a class currently enjoying great popularity on the West Coast. It seems to be filling a long-neglected need for a "low-budget" customizers' class. Usually limited to cars having no custom bodywork or special upholstery at all, cars in this class compete on the basis of over-all appearance and condition, similar to the "concours" events held by sports car and classic car groups. Surprisingly, this class is sometimes the spectators' favorite, for wild

flame paint jobs, striping, external exhaust systems, and special fender skirt and wheel disc treatments typify the modifications found in this group.

Semi Custom class competitors are allowed more freedom of design expression than the Mild Custom entrants—cars in this division are allowed any and all custom modifications, both external and internal, *except major alterations consisting of chopped tops, sectioned bodies, and bodies channeled down over the frame.* Since the three modifications excluded are generally accepted as being the most expensive to perform, this class hits the question of amount invested in the middle.

Full-Custom is the prima donna class at any auto show. This is where the all-out, really radical custom cars compete for the judges' favor. With no holds barred on the amount or nature of the modifications incorporated, these are usually the most expensive cars in the show from the standpoint of money invested. From the viewpoint of the club sponsors, this class is similar to the one for Competition Cars, in that it may be left out if it is believed that insufficient numbers of cars in this category will be attracted to the event. On the other hand, when an impressive turnout of Full Customs is expected, the class is usually divided into Full Custom and Full Custom Convertible, so as to separate the open and closed body cars. This same division according to hard or soft top is sometimes extended even to the Semi-Custom Class, if the entry list warrants.

Actually, since you've got to draw the line somewhere, you might as well follow the example of the many clubs standing firm on the "five cars to a class minimum" rule. Giving out first, second, and third place

trop  
that  
the  
real  
C  
first  
thir  
Roa  
Sem  
not  
clas  
Clas  
Anti  
cycle  
typic

one-o  
antiqu  
of a s  
Altho  
hodge  
owner  
one o  
univer  
huling  
hardw  
Class  
enough  
shows  
results  
can tak  
the ex  
clude  
Custom  
popula  
War C  
48 an  
change  
cars du

trophies in a class having less entries than that is foolish anyway—the fellows who get the hardware under these circumstances don't really feel that they've won anything anyway!

Our recommendation to a club holding its first show would be to offer first, second and third place trophies in the following classes: Roadster, Street Hot Rod, Mild Custom, Semi Custom, and the Special Class. Cars not eligible for entry in any of the first four classes listed above would go into the Special Class, *unless five of the same type showed up.* Antiques, Classics, Sports Cars, and Motorcycles are also bait for the Special Class. A typical Special Class might consist of these



one-of-a-kind entries: a track roadster, an antique, or classic, a motorcycle, some kind of a sports car, and perhaps a Full Custom. Although this sounds like an unreasonableodge-podge, you're actually giving the cars' owners concerned a break—they're each just one of a kind at your show, and under the universally recognized five cars to a class ruling, they wouldn't have *any* chance at the hardware at all were it not for the Special Class you've set up. This class, strangely enough, is another crowd-pleaser, because it shows the variety of shapes and sizes the results of an automotive enthusiast's hobby can take. Classes you may wish to add, should the expected entry list warrant them, may include the Convertible division for the Semi Custom and Full Custom Classes, and the popular Pre-War Custom division. The "Pre-War Custom" class is open to cars made in '48 and earlier, due to the fact the styling changed little or not at all on most pre-war cars during the early post-war model years.

It's generally agreed that whether or not a Pre-War Custom Class is provided at a show or not, if a car has been chopped, channeled, or sectioned, it is a Full Custom and competes in the class of the same name. Thus Pre-War Custom divisions become additional Semi Custom classes in effect. This is why you won't need one at all unless you anticipate a sufficient number of early model customs to make up the additional class.

## JUDGES

All too often a club thinks the battle is over when the show actually starts. After all the work and preparation that's gone before, it's a great temptation to feel that it's all over but the shouting come show day, and you may be right—the shouting may be long, loud, and entirely justified if the cars are unfairly judged—and the judging is only as good as the judges doing it.

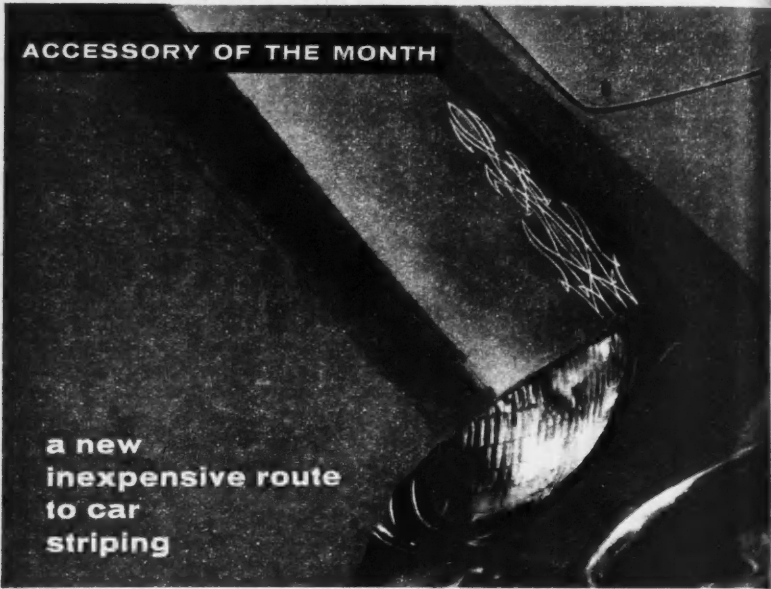
Three judges are usually adequate—one should be a policeman, preferably a traffic officer due to his special knowledge of the state vehicle code; while the others should be allied to the automotive field either through their hobby or vocation. But make sure they aren't so closely affiliated with rodding and customizing that prejudice may enter the picture. Having the proprietor of a body shop who knows custom work for a judge is a fine idea—unless some of his own work is represented among the entry list!

If selecting outside judges poses an apparently unsolvable problem, don't fight—select the three men most competent for the task from your own Competition Committee and let them do the job—or better yet, take two of them and add a traffic officer to handle the safety check end of the judging task. Whatever you do, stick to an odd number—with three judges a deadlock is impossible. During the show, your Facilities Committee should equip each judge with a clipboard containing blank judging sheets (furnished by the Competition Committee) and assign a club-member to him as messenger. As each car is judged, the judging sheet carrying its score is given to the messenger who takes it to the Competition Committee's hideout where they are tabulating the cars' points.

## POINTS

Many clubs have tried various different methods of points scoring for auto shows,  
CONTINUED ON PAGE 62





ACCESSORY OF THE MONTH

a new  
inexpensive route  
to car  
striping

# PIN STRIPES

Photos by Jim Potter

WE NEED NOT EXPOUND on the popularity of car striping for in less than two short years this decorative, abstract type automotive striping has become as standard as louvers and lowering blocks to hot rod and custom car enthusiasts everywhere. Recently though, we were introduced to a new and revolutionary item concerning this popular fad, one which we feel will reach wide acceptance among those enthusiasts who reside in remote areas where car strippers are a scarce breed. The product is called "Pin Stripes", a package of very durable

and genuine appearing decals of various sizes, designs and shapes, that can easily be permanently bonded to the fenders, hood, doors and deck lid of your car in a matter of minutes. The made-ready stripes come in two colors, white and maroon, and the complete package costs as little as \$4.95. Many of the leading accessory stores already stock "Pin Stripes", but if you find that they are not yet available at your local automotive accessory store, write directly to the manufacturer, Fell Products Company, Box 2666, CC, Santa Monica, California.





1. Instructions accompany "Pin Stripes". Incidentals pictured are also needed.



2. Cut "Pin Stripes" apart and soak in water for approximately ten full seconds.



3. Clean surface thoroughly of wax and dirt, then slide stripes from backing.



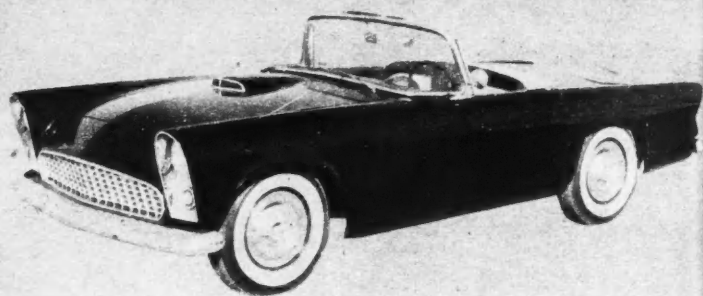
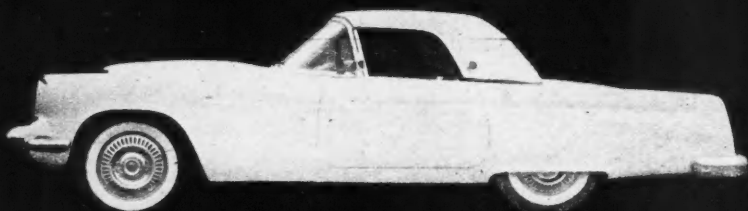
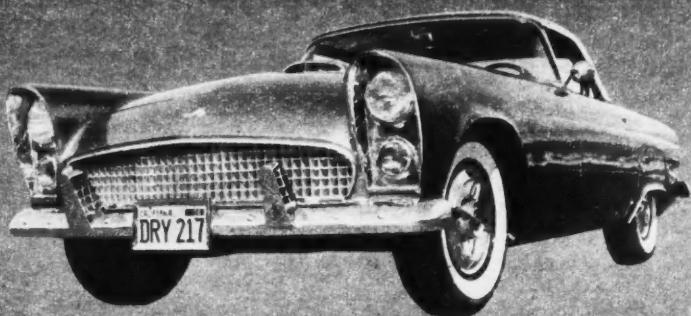
4. Smooth stripes gently with edge of cardboard, working from center to edge.



5. Wipe "Pin Stripes" lightly with clean damp cloth, then allow to dry overnight.



6. Waxing is last step. "Pin Stripes" lend legitimate appearance and are very durable.



# RETYLING THE T BIRD

Photos by Fermoye, Rickman, Barris



*Bill Sheehan, Oakland, Calif., owns this gold and beige 'Bird customized at Gordon Vann's shop in Berkeley, Calif.*

*Bumper guards and taillight hoods were hand formed, use Buick's taillight, back-up light, Austin-Healy stoplight.*

*Sheehan's mill is  $\frac{1}{8} \times \frac{1}{8}$ , has Winfield cam, ported heads, Spalding ignition, plus McCulloch supercharger.*



**A**DVENT OF THE Ford Thunderbird upon the new-car scene for '55 resulted in a great, collective sigh of relief from the street hot rod enthusiasts. After all, Model "T" bodies were practically extinct, and "A", '32, and '34 components were becoming so scarce as to excite comment whenever any were uncovered.

But Ford Motor Company didn't let the odds down — they've got a tradition to keep alive, too. The street roadster of the future burst forth billed as "the personal car" — but from the died-in-the-wool rod and custom fans, the cry went out: "They finally built a car to replace the Deuce!"

As the availability of the T-Bird becomes more widespread through its second-hand distribution on the nation's used car lots, more and more amateur restylists will be using them as foils for their ingenuity. Perhaps twenty years hence you'll hear someone say "I know where you can get a real sanitary '55 T-Bird; no rust, no dents, and the old duffer who owns it doesn't know what it's worth!" Sound familiar?

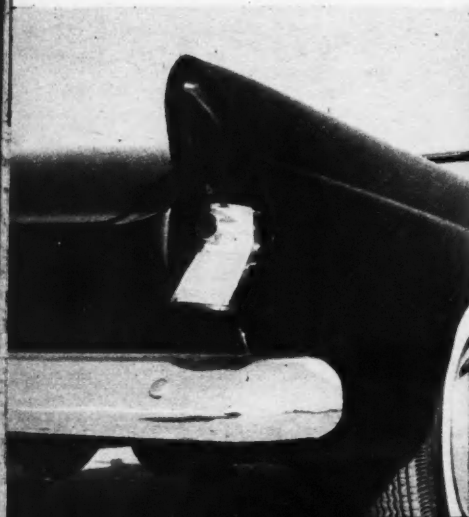
**CONTINUED**

# RESTYLING THE T BIRD continued

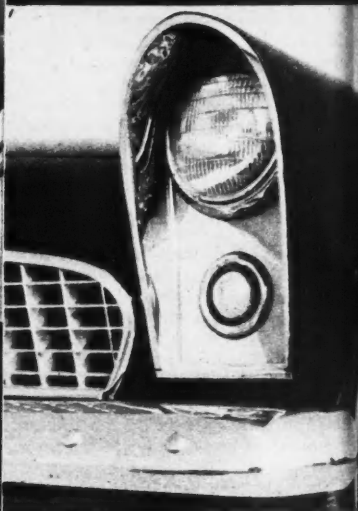


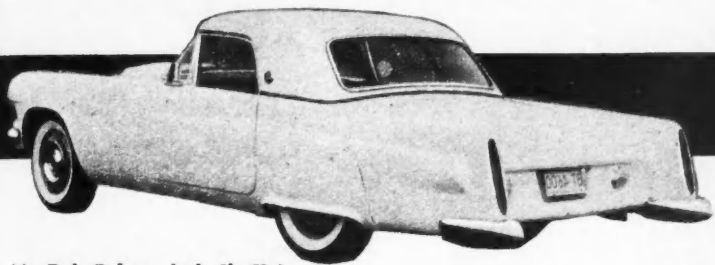
*Like Sheehan's 'Bird, this one, is result of Gordon Vann's hand work with metal shaping technique.*

*In addition to all-aluminum gas tank doors Vann re-created exhausts with three alloy burner outlets. The taillights are set into rear fenders requiring tedious flattening-out action on entire panel, plus the one half-inch work around the*



*Egg crate grille is 1/2" aluminum strip. Deeply shaped headlights, like grille, also appear on Sheehan's 'Bird, are Gordon Vann originals hand-formed from light gauge sheet steel, then chrome plated.*





Detroit's Bob Palmer had ClarkKaiser restyle his 'Bird, then topped-off the job with Pearl-White paint, Gold trim.

me, Unique grille consists of two '53 Stude gravel pans sandwiching '53 Buick bumper carrying '53 Mercury guards. Hood scoop was extended. ch-bus Wheel discs are from Chrysler "300". Emblem on top works electric doors.



Tips from four '55 Ford bumpers were used for nerf bars. Back-up lights fill former exhaust outlets. Taillights shine out through fine-mesh gold-anodized expanded metal grillework in extended fins.

# COLUMN SHIFT

## FOR EARLY FORDS

how-to-do-it feature



**F**UNCTIONAL CUSTOMIZING has long been one of the keynotes of hot rodding. Installing a column shift transmission and its related parts in Fords built before this feature was available as original equipment has been a classic example of this since the feature's introduction in 1940. Through the cooperation of genial "Tim" Timmerman, the following three pages contain a pictorial description of the operations required to install a column shift in any Ford built from '34 through '39. Pre-'34 models modified to use a '34 X-member may be converted with the same techniques, while Deuces and A-V8's may be shifted in the modern manner through use of the hydraulic clutch conversion in connection with the column box. Installation of swing pedals and the hydraulic clutch "slave" cylinders (distributed by Tim's Precision Engines, 166 No. Kinneloa St., Pasadena, California) was covered in the June, 1955 issue of Car Craft.

Since the great majority of rod and custom fans owning pre-war Fords are already well aware of the operations necessary to remove and replace the rear end and transmission, we'll take it from there...

ed-  
ile  
ole  
ial  
he  
9.  
ne  
gh  
ls-  
a's  
he  
re  
nd



c  
be  
m  
low  
ins  
a  
s

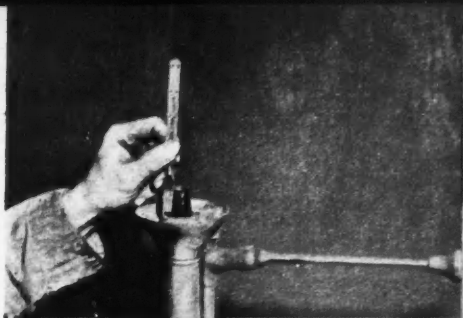
A  
e  
cle  
br  
h  
u

ma  
Th  
i  
si  
up

V  
i  
s

PR

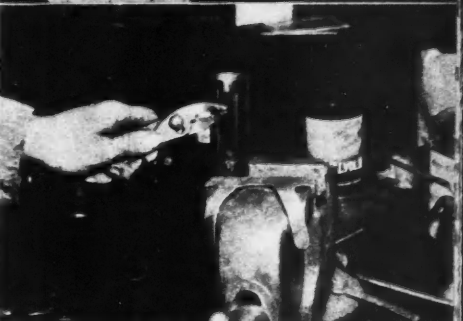
*First step is obtaining a '40-'48 column — getting one from a wreck has the advantage of allowing you to measure the distance it should be below the steering wheel when properly installed. Remove your stock column and slip the new one on — it's probably too long to go on all the way, so measure the difference and cut it.*



*Although the amount to be removed varies according to what year car is being converted, it's nearly always enough to lose both the lower clamp-slot and the shift tube support bracket locating pin hole. Replacing these two necessary features higher-up on the column is described in the photo sequence which follows.*



*After cutting the column to length make two parallel cuts, then bend out the remaining strip and snip off to form slot for lower column clamp. This need not be exactly like the original but should be a reasonable facsimile so that the clamp will tighten-up properly thus preventing annoying steering column rattles later.*

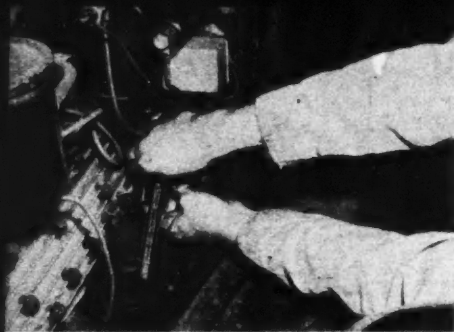


*With column slipped in place minus shift tube, measurement from steering shaft down to column should be the same as that taken in first step.*

*Now remove column, install shift tube and its support bracket, and try it again. In most cases you'll find it too is much longer than you need, so get ready for more cutting.*



CONTINUED



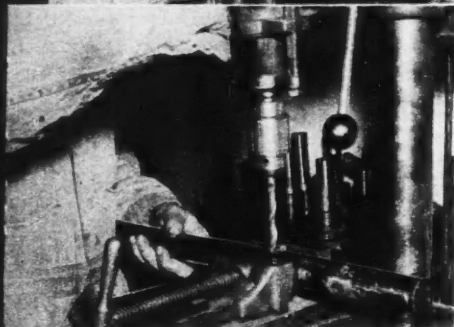
## COLUMN SHIFT

continued

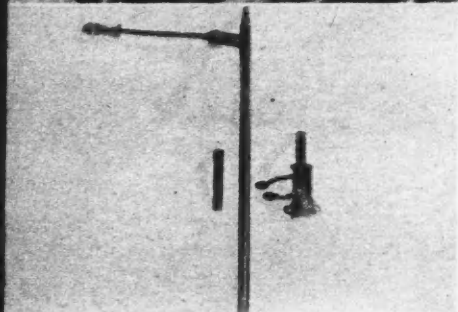
*With shift tube on column, slide assembly up until clearance for shifting arms is obtained, then measure distance from where column should be to where it actually is. This is the amount you'll remove from the shift tube, and also the distance from the former locating pin hole to the new one you'll drill.*



*Rather than try to measure from the hole in the part you cut off to where the new hole should be, mark off the amount the shifting tube must be shortened on the column. Position the shift tube support bracket on the mark and make another mark where the bracket's locating pin rests and you'll be ready to drill.*

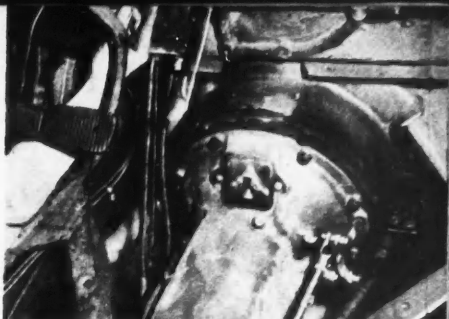


*Here's the first step of the conversion you may have to "job out". After the shift tube support bracket locating pin hole has been drilled in the column you can make two backsaw cuts in the shift tube itself so as to remove a section of the proper length. Anywhere on the tube will do so make it where you can get at it in the car.*



*Sectioned shift tube assembly looks like this; reason for making cuts at points accessible when unit is installed in car is because tack welding will be necessary after positioning. Don't get ahead of yourself at this stage of the game by welding the tube without trying it in the car and tacking it first — you might be sorry.*

With column and complete shifting tube assembly in place, hook-up shifting rods and place transmission arms in neutral position. Move column shift lever to neutral position, then make mark across where two halves of shifting tube meet. Note that clutch throwout shaft has been reversed to facilitate hydraulic operation.

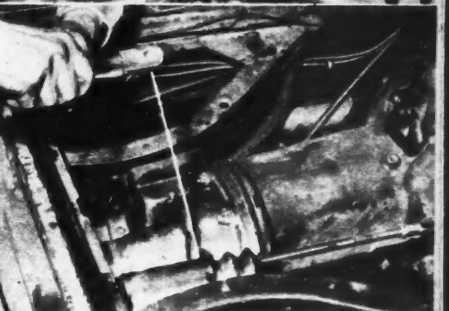
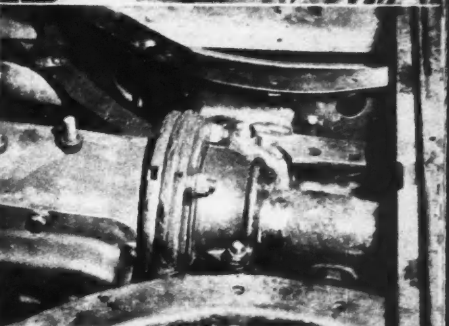


Your local welding shop enters the scene for the tacking and welding operation. After initial tacking, try "going through the gears" to insure against interference with dash in second, etc., then weld 'er up. Relief in floorboard flange was another torch job needed on this car but many models will not need one.



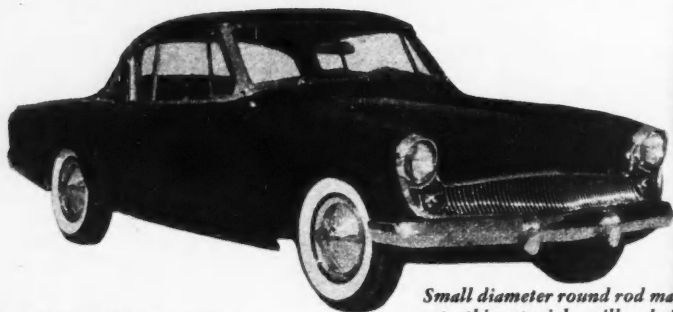
After adjusting shifting rods for proper gear engagement, strap steel bracket was tacked to '34 cross-member in the "A" used as our example. Two holes in bracket are for slave cylinder needed for hydraulic clutch actuation already installed. '34-'39 Ford clutch pedals hook-up to column boxes without any alterations at all.

With slave cylinder temporarily mounted for alignment, bracket is arced permanently in place. After hydraulic line is routed up to clutch cylinder a linkage adjustment finishes the job. This car uses dual '52 Ford brake pedals and master cylinders for both clutch and brake, although many others are equally suitable.



# GRAB BAG

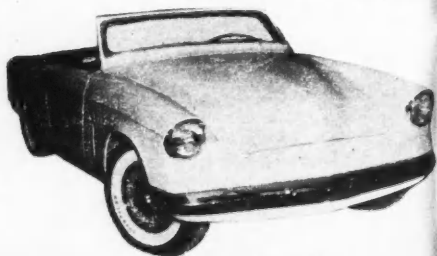
"face lifting" the '53-'54 Studebaker



*Small diameter round rod makes up this special grille design. Note how grille ends turn up and blend into the headlights.*

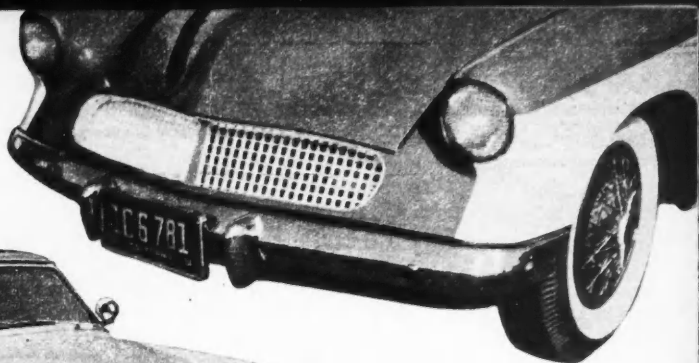
**W**HEN IT COMES to special grilles no one model lends itself to such versatility as that of the '53-'54 Studebaker. The contours of the front body and grille panels are such that just about any special grille creation will fit and add that custom touch. The main reason for this is that the two stock oblong grille openings need only to be reworked slightly to form a natural cavity for any type of multiple bar or mesh screen grille assembly. The seven illustrations found on these two pages will explain what we mean and should start many of you Stude enthusiasts thinking of a special grille piece for your custom-to-be.

*With upper grille section filled in solid, lower pan design supplies cooling to engine. Stock bumper carries chrome feature.*

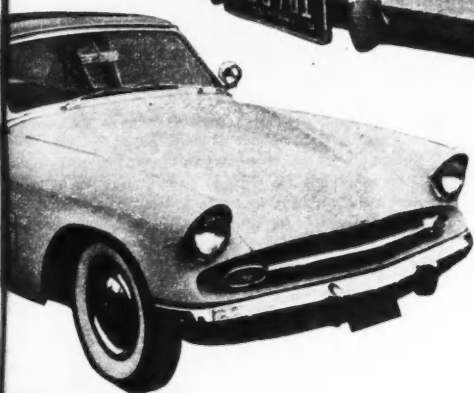


*'54 Pontiac grille bar nestles in this reworked cavity. Special extension pieces were made to extend the cavity's full width.*

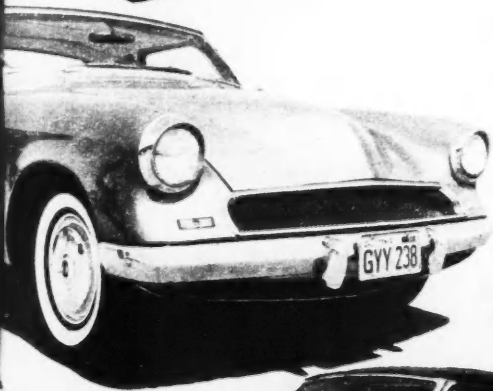




*Oblong opening was fabricated in the front nose of this Studebaker and filled in with a checkered strap metal pattern.*

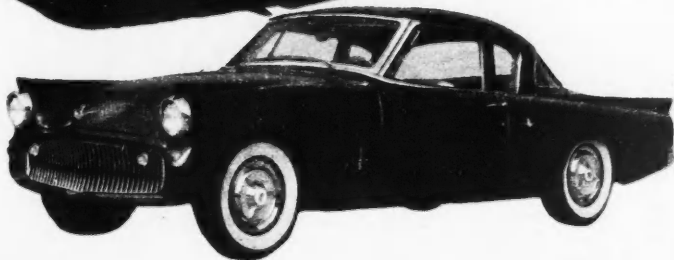


*Transforming stock openings to long oblong cavity facilitates floating bar arrangements such as this '55 Chrysler component.*



*T-Bird grille piece frames this expanded metal grille assembly. Chroming expanded metal is another thought. Note park lights.*

*BELOW: Grille cavity was constructed by splicing two lower Stude grille pans together, then adding special round rod grille.*



# WHAT'S YOUR PROBLEM?



By Bob Pendergast

## SPORTS CAR QUERY

Dear Bob:

I have the bug to build a sports car. I would like to know what older car (Ford if possible) chassis and springs would be best to use and easy to work with.

— Johnnie L. Carpenter,  
McCook, Nebraska

Suggest you consider using a '33 Plymouth frame, front suspension, steering gear; with Chevrolet rear axle, driveshaft, and transmission. Many V8 engines can be adapted to the Chevrolet transmission, the easiest being, of course, the Chevrolet V8, which is also the lightest.

## BUGGED BY BABBITT

Dear Bob:

I have a '50 Chevrolet which I have driven 20,000 miles since purchased immediately after an overhaul. Due to its lack of performance I milled .060" off the head, installed a dual intake manifold and dual exhausts, and a set of hi-lift rocker arms. Since then, I have had to replace the rods twice. I've been told I should have a truck shop pour me some diesel-babbitt rods, while others say to install insert type rods. What's the way out on my problem?

— Fred Bpwer,  
Corvallis, Oregon

Babbitt rods are for the birds, no matter what kind of babbitt is used or how thick it is poured. Modern insert-type rods are the answer. Frank McGurk, 1326 Halldale Ave., Gardena, Calif., has an exchange arrangement whereby you can trade in your obsolete poured-bearing rods

on the modern insert type for a nominal cost — much cheaper than putting in new rods at the rate you're going through them.

## BRAKES AND GEARS

Dear Bob:

I'm installing a '54 Olds V8 engine in my '51 Ford convertible. I want to use a heavy-duty transmission, and if it's considered advisable, larger brakes on the front, so as to beef-up the car in proportion to the increased power and weight. What do you suggest?

— Frank Braton  
Kansas City, Mo.

Suggest you use any year Cadillac V8 column-shift transmission if you wish to keep that type of shift; or, if floor shift is acceptable, any year V8 Cad or LaSalle box. Conversion kits are available to adapt these boxes to Ford U-joints and driveshafts from Transmission Specialists, 355 E. Manchester Blvd., Los Angeles, Calif.

Lincoln front brakes are very desirable when a heavier engine is installed in a Ford; changeover is relatively simple. '49 through '51 models are suitable for this swap.

## TIMING TWIST

Dear Bob:

In the 1957 Hot Rod Annual there was an illustration that led me to believe that a stock cam could be altered to give more pep. Is this true, or did I misunderstand it?

I've also heard that if I plane the heads on my Ford, I'll get the same results as with regular high-compression heads. Is this also true, and would they crack from engine heat because of their thinness? If these two things can be done, what would they cost?

— Ronald Keiser,  
Omaha, Nebraska

Some stock cams can be retimed in relation to the crankshaft so as to give a later intake valve closing point, thus detracting from low rpm performance but helping out the top-end. Juggling the timing a few degrees in this direction is only practical when the cam concerned has an intake opening point of more degrees before top dead center than the exhaust valve's closing point after top dead center. As a general rule, overall performance from most engines is best if the intake opening point and the exhaust valve closing point occur the same number of degrees before and after top dead center, respectively. This is referred to as "split overlap".

The performance gain thus obtained is a



drop in the bucket compared to what a good 1/4 cam can give you — and the same applies to milled heads versus racing heads. Check with our advertisers regarding prices on these.

#### OLDS COMPONENT SELECTION

Dear Bob:

I recently purchased a '49 Olds Super 88, and would like to replace the present engine and transmission with later components. What would you suggest, and what must be done about the electrical system?

— Joseph Jill,  
Richmond Hill, N.Y.

I suggest you use '52 Olds engine which has hi-lift rockers, 4-throat carburetor, etc., like the '53, and 6-V starter and generator, thus eliminating a costly, tedious, and time-consuming electrical system changeover. Use the '54 hydramatic for its added strength, more positive shifting, and dual-range feature. A '53 or later steering column mast jacket with the proper selector lever quadrant must be installed along with dual-range hydramatic.

#### BEEFY CLUTCH

Dear Bob:

I have a '46 Mercury with speed equipment. Will my '46 flywheel take a '46 Lincoln clutch, or what changes would I have to make to use this beefier unit?

— Salvatore Schettina,  
Brooklyn, N.Y.

The Lincoln Clutch may be adapted to the Mercury engine by use of the '46-'48 Ford "6" flywheel and 11" clutch disc.



#### CHROME-PLATED BRASS SWITCH PLATES

Featuring a 3 position switch, these new EELCO Gang Switch Plates are made to mount 3, 4 or 5 switches. The addition of a momentary (on) is useful for operating solenoids, speakers, horns, courtesy lights, etc. 3-4 or 5 Gang.

Plates.....\$1.00 ea.  
Switches.....40c ea.

#### EELCO MANUFACTURING & SUPPLY CO.

3021 Nebraska C-4 Santa Monica, Calif.

#### TWO-TONE DENIM SEAT COVERS

EASY TO INSTALL  
DURABLE,  
WASHABLE

\$2.98 ea.  
ppd.  
C.O.D.



**Treat your seats to striped or plaid denim covers.** Reversible and washable, they slip on easily and are secured with tacks. Specify year and model of car and split or solid front seat. Solid rear only. \$2.98 each; set, \$5.75. Add 25c postage. Order from Mardo Sales, Dept. CR-4 480 Lexington Ave., New York 17, N. Y.

#### FINEST CLUB PLAQUES IN THE NATION

#### CUSTOM DESIGNED FOR YOUR CLUB!

- Heavy, 3-D aluminum or brass castings.
- Also steel and enamel models without pattern charge.
- Many stock designs for individual orders.
- Complete service, polishing, painting, drilling, mounts.
- Free literature.

SEND 25c TODAY

For complete catalog on Emblems, Jackets, Decals, Plaques, Novelties—including information on how to start your Club.

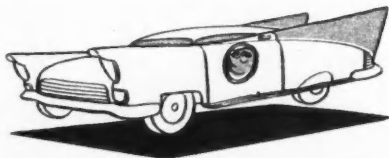
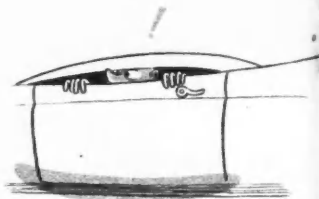
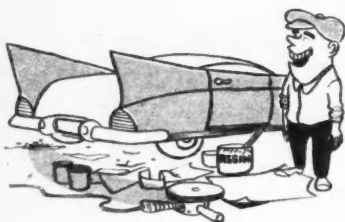
#### STYLIZED EMBLEM CO.

1072 No.-c-Wilton Pl., Hollywood 38, Calif.



# "junior flip"

the "livin' end"



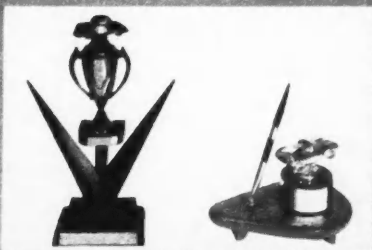
By Carl Kohler



**ATTENTION  
ALL CAR CLUBS**

**LET US HELP YOU WITH YOUR TROPHY NEEDS**

**Quality craftsmanship  
and design in Trophies,  
Plaques, Cups, Medals and  
Engraving. We ship anywhere.  
For Free Catalog and  
Club Discount, write**



**BUY DIRECT FROM MANUFACTURER AND SAVE**

**CUSTOM TROPHY**

**MFG  
CO.**

**5011 EXPOSITION BLVD.  
LOS ANGELES 16, CALIF.**

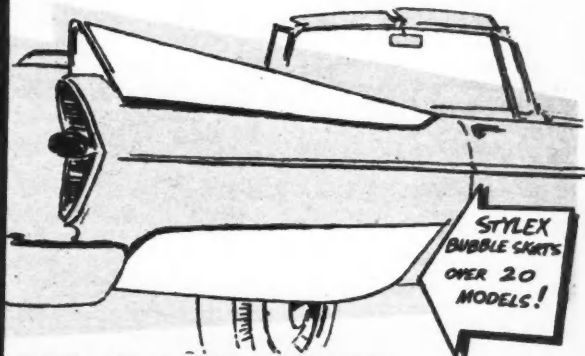
# *Now!* **TAIL FINS**

**ADD 1960 STYLING AND INCREASE  
ROAD STABILITY...**

**LONGEST FINS  
AVAILABLE  
•  
GIVES LONGER  
LOWER LOOK  
•  
INSTALLS IN  
A JIFFY  
•  
ALL STEEL  
CONSTRUCTION**

*Stylex* **co.**

**23919 BLACKSTONE  
VAN DYKE, MICHIGAN**



**STYLEX  
BUBBLE SKIRTS  
OVER 20  
MODELS!**

**WRITE FOR FURTHER INFORMATION**



## MODIFYING THE McCULLOCH

continued

*Standard McCulloch impeller and housing are used in Howard-converted units. Impeller RPM varies with gearing but is usually kept under 40,000 to avoid excessive shock loads on drive gears when sudden speed changes are imposed, such as drag race gear-shifts.*

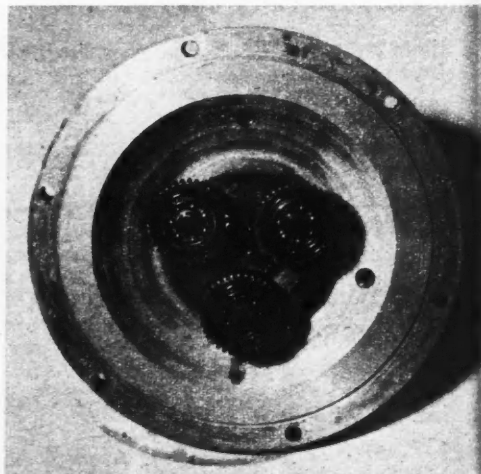
box that is connected to the outlet side of the blower with a rubber hose. By enclosing the carburetors in this manner they are completely surrounded by the air delivered by the blower and as a result the air above the fuel in their float bowls is automatically maintained at the same pressure as the air that enters their air horns and there is no change in their normal fuel metering characteristics.

The carburetor box, or enclosure, on Rudy's engine was made by Morco Engineering, Gardena, Calif. Morco Engineering is owned and operated by Howard Moore. The specialty at Morco is McCulloch installations and Howard designed the carburetor enclosures, which are available with complete in-

stallation kits, to eliminate the problem of having to convert carburetors to run under conditions they weren't designed for.

The enclosure is of cast aluminum and it has an aluminum base plate that slips over the studs of the carburetor flanges on the intake manifold where it is held in place by the carburetors. The enclosure is clamped to the base plate by four long studs that pass through its top surface. Attached to the bottom of the base plate is a fuel block that receives fuel from the pump; the fuel lines to the individual carburetors are inside the box. Another block attached to the bottom of the plate serves as a mount for a throttle lever that extends up into the enclosure and con-

*Three pinion gears shown here drive sun gear with power transmitted from ring gear in blowers converted by Howard Johansen. Close examination of this photo will reveal the ball bearings these gears require due to their high operating speed.*



and  
verted  
gear-  
100 to  
drive  
are  
shifts.



**Complete Morco Engineering carburetor enclosure kit for triple manifold. Required inside fuel lines, linkage are included.**

on of  
under

and it  
over the  
by  
pass  
bot-  
that  
es to  
box  
the  
ever  
con-

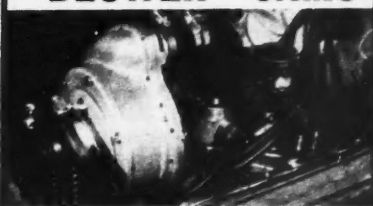
nects to the linkage for the carburetor throttle valves. The lower end of the lever is connected to the car's original throttle mechanism.

An enclosure of this type provides the only logical means of obtaining maximum performance from a McCulloch, and at the present time Morco is making them for Ford, T-Bird, Chevrolet, Corvette, and Cadillac.

The only problem of a stock McCulloch installation that isn't cured by a Morco enclosure is the one of boosting the fuel pressure to the carburetors. The pressure must be raised to a value equal to that put out by the blower, plus the normal pressure required by the carburetor. In normal installations an attempt is made to maintain the correct pressure by using one or two electric fuel pumps along with the stock pump but this arrangement is seldom adequate and for high blower pressures (when someone tampers with the blower control) it rarely does the job at all. On Howard's Chevy and Rudy's Caddy the problem was solved nicely by the installation of an aircraft-type centrifugal pump that is diaphragm controlled to pump a predetermined pressure above that of the blower output. The pump is belt driven and other than for the fuel lines connected to it all it needs is a pressure line from the blower's outlet.

Howard Johansen's blower conversions are not available to purchasers yet but in the near future he hopes to have kits for many of the more popular overhead valve V8 engines. These will be for competition use only and will include, in addition to the chain-driven blower, a fuel injector, so that it will not be necessary to use carburetors, and one of the aircraft fuel pumps. However, injectors in the kits will not have a carburetor, such as the one on Howard's Chevy.

## "BLOWER" CAMS



Constant research and development of cam grinds required for use in a Super charged engine has enabled Howard's Cams to now offer a cam for the "Blown" O.H.V. engine that will give sensational performance for both street and competition use.

Howard's "Blower" Cam kit features steel mushroom cobalt faced tappets chromoly tubular push rods, adjustable rocker arms and dual valve springs.

## HOWARD'S RACING CAMS

(Howard Johansen, owner)

10122 South Main St., Dept. CC

L. A. Calif. Phone Pleasant 5-5314

## DE-CHROME for \$6.49

DO-IT-YOURSELF using new mechanical Hole-Filling method. QUICK-EASY!



### REPLACES METAL WITH METAL

1. Ream hole with 60° reamer.
  2. Insert Hol-Fil plug from outside.
  3. Tighten nut — twist off screw.
  4. Grind nut flush with body.
- Plugs to fit standard 1/4" or 7/16" holes. Drill odd sized holes to above sizes.

**Prices:** Complete Kit (Reamer, 50 plugs) \$6.49 ppd. Reamer only \$1.49; Extra plugs \$1.50 doz. \$1.00 deposit on COD orders. Michigan residents add 3% Sales Tax.

**Order Direct**

# Hol-fil

BRANDON AUTOMOTIVE INDUSTRIES  
1517 NEW YORK AVE.  
LANSING 6, MICH.

## AUTO SHOW

continued

*Borrowed house trailer makes best-yet "hideout" for judges during hectic points computation period of show. Enterprising Renegades club used adding machine; gave tapes to contestants after show was completed.*



some good, some not so good. For the first time out, it would be a good plan to avoid experimenting. Fortunately, one point system has survived the test of time and is widely used — not because it's necessarily the best possible, but because it's simple and readily understood by everyone at the show — competitors, judges, and spectators alike.

This system is based on five categories: Safety (according to your state vehicle code), Appearance, Workmanship, Interior, Originality in Design. Each category is worth a maximum of 10 points, thus allowing a total of 50 points for a perfect car of outstanding originality. In this writer's opinion that car is yet to be built; the average car should be worth a total of 20 points — see that the judges realize this and don't start out being too liberal with points as they go down the line or catastrophe will strike your show. Why? Because sure as you're living they'll find a better car further down the line, but won't be able to grant it the extra points it deserves because they've already given the maximum to a not-quite-as-nice machine early in the judging. The average car would rate a score of 4 in any given category — it's got to be really outstanding to get those extra points.

Lets take an example — suppose the judges don't know this, and give one of the first cars judged a score of 10 on Safety, because it is in perfect mechanical condition. Then further along they discover a car that is its equal in every way, but in addition the owner has installed safety belts both front and rear. Obviously this should be good for an extra point or two, but because of the overly high score on the previous car, the judges find themselves "out of points". An unfair scoring results, and you can be sure that your show and the judges will not win a popularity award because of it. So be sure to thoroughly explain the points

system to your judges — you'll avoid them unwittingly committing some glaring injustices.

### SWEEPSTAKES

Selecting the "best car in show" for the coveted Sweepstakes Award must be done by the judges as soon as they have looked at the last car in line. Since this Award is the most prized of all, it is customary not to give a car both the Sweepstakes Award and a first place trophy in class. Should the judges discover, as they probably will, that the car selected as best in show has also accumulated enough points to win its class, the Competition Committee must be instructed by them to move up each car in that class one place and award the trophies for first, second, and third accordingly.

### PROGRAMMING

Which brings us right up to the wire — it's bright and early the day of the show and your club is down at the show grounds getting set up for the forthcoming crowd of spectators and entrants. Your Finance Committee is all primed to sell tickets at the gate, equipped with the tools of their trade — a card table, a roll of tickets, a cash box, and couple of club members adept at making correct change.

The Promotion Committee, operating from a picnic table or something similar, is processing the entry blanks of post-entries, and returning blanks to entrants who mailed theirs in previously in response to your posters, and who are now showing up to compete.

Entrants go from the Promotion Committee to the stamping grounds of the Competition Committee, where the classes of competition are thoroughly explained to each of them and their car is classified. The Facilities Committee is working right with the Competition Committee here, making up descriptive signs for

each of the cars, giving such information as make, year, model, engine, owner's name, etc., in addition to the car's class designating letter and competition number. All this sign making is best done inside whatever enclosure was provided for the competition committee—a recreation clubhouse, if your show is in a park, or perhaps even a borrowed house-trailer if the wide open spaces are your dish. This "office" is necessary, not just for sign making now, but for the Competition Committee to use as sanctuary during the points computation session that will follow the judging. During this particular interval they will naturally want to be free of well-meaning spectators' distracting questions, etc. While all this is going on your Special Events Committee is supplying background music (records, tapes, etc.) over the PA and making announcements about the spectators' participation in the show via the Queen Contest. It doesn't matter if there are any spectators actually there yet or not; practice makes perfect!

In the same vein, your club members milling around the field, the cars lined-up being classified, and the PA booming out, all combine to make it look as if something big is happening out there. This is good, because it will pull in many spectators off the street who never heard of your club or your show, but just happened to be passing by. To help this along, all your club members should have their cars clean and polished to their sharpest appearance—then instead of parking them outside, they should be brought in as an exhibit of your own rolling stock. A good place to put them is right with the trophy display. A sign proclaiming the ownership of the cars is all that is needed, and explaining that they are only on exhibition and not competing for awards should be posted along with them. All this hoopla helps prime the pump to get the show underway and gloss over that awkward period early in the day when nobody's out there but the club. Anything along the same lines to make it look like something interesting is fine.

Your Awards Committee should now be engaged in putting up the display of trophies to be awarded. Having your Queen Contest entrants assist in this operation is sure to attract the spectators' attention to the display right away. The girls concerned should be dressed conspicuously, in shorts and sweater or possibly semi-formal attire, so as to not blend in with the spectators. They should wear some

CONTINUED ON PAGE 66



## TROPHYS

Discount to Clubs

**BLUE RIBBON TROPHY CO.**

8929 S. Western—Los Angeles

7320 Sepulveda Blvd.

Van Nuys, Calif.

PL. 8-1173—ST. 2-6060

## RAMCOTE FLEXIBLE FINISHES

Restores—Colors  
Protects Leather,  
Leatherette and  
Vinyl Plastic

Is your leather or plastic upholstery faded or worn? RamCote restores the original color and texture to your car's upholstery. You can change color, too! Available in eleven standard colors and clear. Any shade obtainable by inter-mixing colors. Easily applied, brush or spray.

Won't chip or peel. Waterproof—fadeproof. Use on Luggage, Sports Equipment, Lounge Chairs, etc. See your local dealer or write for FREE information and color chart.

**RAMCOTE PRODUCTS**

1141 W. 69th St.

Chicago 21, Ill. Dept. C.G.



## "JET SWEEP" FENDER FINS

For '49-'50-'51 Fords



### FIN KIT includes

2 fender fins & Plastic Surgeon  
Welding Kit;

**SPECIAL INTRODUCTORY  
PRICE \$7980**

per pair . . . postpaid (inc. tax in Calif.)

Send 25¢ for descriptive literature on all  
Fiber Glass customizing parts and methods.

**LEE ROCKWELL**

Dept. CC Box 1 • Tustin, Calif.





## CUSTOM QUERIES

BY  
**NEIL  
EMORY**

### '56 DESOTO TAILLIGHTS FOR CHRYSLER

Dear Neil:

I own a '55 Chrysler Windsor hardtop and wish to install '56 DeSoto station taillights in place of the stock components. I personally feel that they are inner-changeable however, would appreciate you further explaining before I go ahead with the transposition.

— *Eddie Colon*  
Belleville, New Jersey

Your question Eddy, represents many that cross CAR CRAFT'S editorial desk monthly. The questions you mention are valid in every respect, but generally ones that need no explanation from us. I say that because of one simple fact. When a person is contemplating making a styling switch to a stock component on his car there is only one method that he, or even ourselves, can employ to determine just what work will be involved in the transposition. In short, we all are compelled to go directly to the source where the component originates and try it on for size. Most automotive agency's parts departments will extend you the privilege of fitting up a certain part for comparison on your car any time providing it's parked nearby. This is the only way that I know of that a comparison can be made to determine how much work is involved for any type of modification. I bring this point up only because so many readers write in querying us on "will this component fit this, or, will that taillight fit that?" when actually the person questioning the fact could have stopped by his local automotive agency stocking that certain component and tried it on for size, ascertaining the results probably in less time than it took him to drop us a letter and for us to return an answer. Now, getting back to your question, Eddy, the two taillight assemblies appear to be

very close in relation to size. To really determine the switch, I suggest that you call on your local DeSoto dealer and try one on for size?

### BUICK TAILLIGHTS FOR NEW CHEV

Dear Neil:

I am customizing my new '55 Chevy and am about to start on the taillights. I have chosen the '56 Buick taillight components and was wondering what will be the best process to employ. First, would it be easier to splice the rear section of the Buick fenders onto my Chev's fenders or would it be better to construct the housings and extension from strictly sheet metal? Also while I am at it I was contemplating installing a continental kit. Would it be much more trouble to match off the fenders with the continental kit?

— *Ben Chesbelski*  
Linden, New York

First, if you have decided on the continental kit, install it. Since most continental kits require the bumper to be moved back various distances you will have to have the kit securely installed in its position. Next, procure your Buick taillight components. Place them up to the bumper in the desired position tack bracing them to your Chev's fenders. The open area between the taillights and the fenders should be filled in with sheet metal, welded solid, then finished off. The job will be one of a major alteration, but should offer a very unique one-of-a-kind appearance. I also suggest that you remove the Chev's original taillight openings completely for best results.

### CORVETTE GRILLE FOR MERC

Dear Neil:

I am customizing my '50 Mercury 4-door and am now ready to give the grille the restyling action. I am planning on using the Corvette grille assembly, but can't seem to find a suitable parking light unit to match up with the grille piece. I want to adapt the parking lights in, or next to the grille, keeping the complete assembly inside the Merc's grille shell. Have you any suggestions for my problem? I also would like to ask you if you could pinpoint any red hot side trim treatments for this particular model?

— *Bob Constantine*  
St. Louis, Missouri

Possible parking lights that you could employ for your particular Corvette grille combo, Bob, would be Henry J or '53 Studebaker components. If you wish a slightly larger unit try '53 Chev-

rolet or '51 Cadillac units. For side trim molding, I suggest '51 Lincoln, '56 Ford Custom Line, or '56 Buick Roadmaster.

#### '56 BUICK BLINKERS FOR CHEVS

Dear Neil:

I'm the proud owner of a '51 Chevrolet and I am contemplating a different (I think) approach to restyling the taillights. I want to use '56 Buick taillights. I've tried the "size-per-fender" and it's quite apparent that the job will require extensive body work. What I'm really concerned about though, is do you think that this particular installation will lend itself to the Chev's body style? Could you fill me in on what would be the best practical method of accomplishing this installation?

— Bill Button

East Tawas, Michigan

I'm afraid, Bill, that you're in for quite a torch session with the installation of the Buick blinkers in your Chev's rear fenders. The Buick lenses would have to be modified considerably because of their size in relationship to the Chev's fenders. The job could be accomplished but much work would be involved. I would think that the '56 Chrysler taillight lens would be a much better component to work with under the circumstances. They are narrower and shorter in size as compared to the Buick lens, which would make the installation chore a much easier operation. Also the Chrysler bumper could be modified to fit your particular body style with very little work. In my opinion this would make a very nice combination. Give it some thought?

# FREE!

ALL-NEW 1957-8

HI-PERFORMANCE  
HANDBOOK-CATALOG  
HOW TO STEP UP YOUR CAR'S  
POWER! MILEAGE! STYLE!

ALL-NEW Catalog reveals TRUTH about Power  
Kia's Give "Sponging" info, Customizing Tips!  
Shows all brands for ALL cars—100,000 items  
in stock Multi-Carburator, Injection, Superchargers,  
Dual Exhausts, Racing Cams, Heads, Pistons, Engines,  
Tires, Latest "Bess-up" Accessories, Chrome, Fiberglass,  
Sport Bodies, etc. Buy DIRECT & SAVE! It's FREE—Write:

**ALMQUIST**

ENG. CO.—Milford, Pa.  
Dept. CCC-4 (Dealers Wanted)



**GM • FORD  
CHRYSLER  
ENGINEERING**

**APPROVED**

**FIBERGLASS  
and RESIN**

**BODY PATCH KIT**

**COMPLETE ONLY \$4.95**

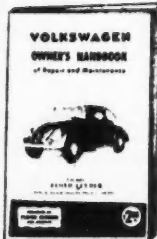
**800" Sq. • Fiber Glass Cloth**

**ORDER DIRECT • DEPT. B**



**Old Ironsides Co.** 17546 Chester  
DETROIT 24, MICH

## VOLKSWAGEN OWNER'S HANDBOOK



**NEW!**

**144 pages  
over 150 illustrations**

Here is a brand new book every VW owner and prospective owner will want. Written by Clymer Publications' Technical Editor, Hank Elfrink, who has recently visited Europe and attended the VW mechanics school, this book gives full details on care and servicing of the VW, in nontechnical language. A MUST for the VW owner and enthusiast. Postpaid. \$2.00

**Floyd Clymer—Dept. CC-4—1268 S. Alvarado, Los Angeles 6, Calif.**

## AROUND THE WORLD

**with Motorcycle and Camera**

This thrill-packed travel book by German journalists and expert photographers, Eitel and Rolf Lange, has many photos and maps of their recent around-the-world journey by motorcycle and sidecar. Educational, humorous and fascinating story of their experiences in every country. 94 photos of famous people and places. Gives details of costs, regulations, problems and all information the world traveler will want to know. 230 pages. NEW, JUST OUT. Postpaid. \$2.50  
Deluxe (Fabrikoid bound with gold leaf lettering). Postpaid. \$4.00

### OTHER BOOKS

1956 INDIANAPOLIS YEARBOOK.....	\$1.50
FORD OWNER'S HANDBOOK.....	\$2.00
CHEVROLET OWNER'S HANDBOOK.....	\$2.00
PLYMOUTH OWNER'S HANDBOOK.....	\$2.00
THE SPORTS CAR ENGINE.....	\$1.50
THE MODERN CHASSIS.....	\$2.00
MODEL T FORD SCRAPBOOK.....	\$2.00

Catalog on 100 books—FREE!

## CUSTOM PIN STRIPING

CUSTOM STRIPE  
YOUR CAR HOOD,  
DECK, ETC. IN  
A MATTER  
OF MINUTES.  
SPECIFY COLOR:  
WHITE, RED,  
OR BLACK.



**\$395**

NO C.O.D.  
POST PD.  
COMPLETE KIT  
NO PAINT  
OR BRUSH  
NEEDED

**CUSTOM AUTO-STRIFE**

BOX 4071 DEPT. 12

DALLAS, TEXAS

## WELD IT YOURSELF! IN A JIFFY!

**Weld, cut, braze, solder IRON,  
STEEL, BRONZE, BRASS, ALUMI-  
NUM & OTHER METALS . . .**

Auto, truck, shop and farm equipment break-down always cause annoying and costly delays. Don't let them bother you. Get a Dynamic Arc Welder. With the Dynamic you can also make your own wrought iron household and lawn furniture and many knick-knacks. You can do expert work on your very first job. Operates from any properly wired 110 volt AC line. The handiest tool in your workshop. A Dynamic Welder will save its low cost of only \$38.50 f.o.b. in both time and money. Literature on larger equipment on request.

**DYNAMIC INDUSTRIAL type transformer Arc Welder 75 amp. output for industrial or Workshop use.**

**DYNAMIC WELDER CO.**

Dept. B64-B 1808 S. Federal  
Chicago 16, Ill.

### EASY PAY PLAN

Low down payment. Pay as you weld. Sold on money back guarantee. Send for details. Complete outfit only

**\$38.50**

f.o.b. factory



**Free Details and "How to Weld"**

## Make More Money in AUTO MECHANICS

Learn at home in spare time. Low tuition "All-in-one" Shop Method course covers Overhaul, Soup-up, Tune-up, Fuel Injection—ALL OTHER PHASES!!! You get everything you need for success in America's BIGGEST Industry. We also give you Motor Analyzing Set; Socket Wrench Set, and complete Tool Set. Write for information. Send coupon TODAY for FREE BOOK & SAMPLE LESSON. NATIONAL SCHOOLS

National Schools Dept. DIE-47  
4000 So. Figueroa Los Angeles 37, Calif.  
Send Free Auto-Diesel Opportunity Book Today.

Name \_\_\_\_\_ Age \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

☐ Check if interested ONLY in Resident School Training at Los Angeles

## AUTO SHOW continued

sort of identifying badge bearing their names, so that the spectators may know who they're voting for when the time comes.

The PA announcements regarding the Queen Contest should be to the effect that the spectators may obtain voting slips at the Trophy Display. This can be handled very simply with a card table, slips of paper, plenty of pencils, and a container labelled "Cast Your Vote Here". Judging of the Queen Contest should be postponed until the last part of the show, to act as a fill-in event while the car's points scores are being tabulated by the Competition Committee. In contrast, judging of the cars should begin no later than noon; fifty cars will take three judges three hours to do, and if you postpone the announcement of the results too long the spectators will lose interest and leave early.

### PRESENTATIONS

First off should be the announcement of the Queen Contest winner. As is standard procedure for beauty contests, everybody wins—almost. Each of the runners-up should be crowned as a princess, with all the girls getting some kind of a nice little award. After all, they've contributed a lot to your show.

After the Queen has been selected, the presentation of class trophies can commence, third place trophies first, followed by second, then first, to build interest. If your timing's right, the Competition Committee will have just completed the points score tabulations as the Special Events Committee is presenting the Queen's last Princess her award—but don't cut it too fine—allow time for everything, and make sure the man on the mike is kept posted as to the Competition Committee's progress, so he can stall a little if necessary. The Sweepstakes Award is, of course, the very last to be announced.

One of the nicest presentations we've ever seen called for each class winner, as soon as his name was announced, to get into his car and slowly drive it up to the announcer's position. There, an area had been roped off and designated as the "Winner's Circle". After being presented his trophy with suitable ceremony by the Queen (or one of her Princesses; they take turns) he moves his car into the "Circle". Believe it or not, this really goes over big with everyone concerned—and you, as well, will feel your show was a big success.

James  
they're

the  
that  
at the  
very  
Henry  
Your  
content  
of the  
car's  
Com-  
ing of  
noon;  
hours  
ment  
low

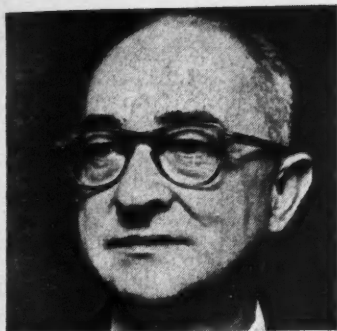
nt of  
pro-  
ins --  
d be  
etting  
r all,

pre-  
third  
then  
right,  
jun  
s the  
g the  
don't  
hing,  
kept  
ttee's  
ssary.  
very

ever-  
on as  
s car  
nner's  
f and  
After  
cere-  
esses;  
o the  
over  
u, as  
ess.

CRAFT





HEDMAN HEDDER DISTRIBUTOR

## V8 DUAL EXHAUST

DUAL SIDE HEAD PIPES **\$12.95**

DUAL SIDE TAIL PIPE

ALL INSTAL' PARTS LESS MUFFLERS

WITH ONE MUFFLER.....\$18.45

WITH TWO MUFFLERS.....22.95

Choice of Glas or Steel Pack Mufflers

55-56 PLY.-50-51 CAD.-49-56 OLDS.-

51-55 STUDE.-53-56 DODGE-

55-56 PONTIAC

53-56 BUICK-52-56 DESOTO-\$13.95

52-56 CHRYSLER-\$16.95

## HONEST ENGINE ADAPTOR HEADQUARTERS

### V8 DUAL EXHAUST

DUAL SIDE HEAD PIPES **\$9.95**

DUAL SIDE TAIL PIPE

ALL INSTAL' PARTS LESS MUFFLERS

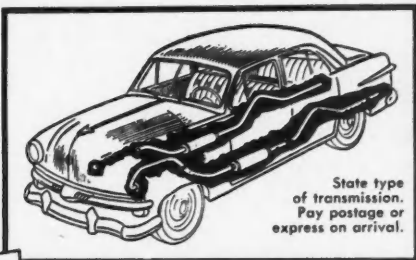
WITH ONE MUFFLER.....\$15.00

WITH TWO MUFFLERS.....18.95

Choice of Glas or Steel Pack Mufflers

55-57 CHEVY-35-57 FORD-39-56 MERC

-35-57 FORD PICKUPS



State type of transmission. Pay postage or express on arrival.

### DUAL MUFFLERS



RIGHT SIDE

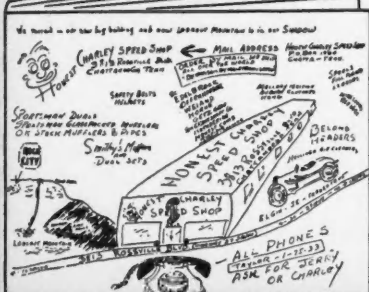


LEFT SIDE

**BOTH ONLY \$9.95**

CHOICE OF GLAS OR STEELPACK (ALSO 57's)

FOR ALL FORD • MERC • CHEVY • PLY THAT ARE EQUIPPED WITH FACTORY DUAL EXHAUST. GIVE PARTICULARS OF YOUR CAR.



**\$1.00 FREE**

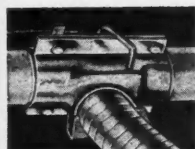
CERTIFICATE - See Inside Back Cover

56-57  
25¢

**SURPRISE MONEY SAVER CATALOG**

SEND 25¢ FOR NEW 1957 SURPRISE MONEY SAVER CATALOG—THEN NEXT ISSUE FREE

**HONEST CHARLEY SPEED SHOP**



### EXHAUST CUT-OUT

Fits any exhaust pipe, any car. Dash control kit is included.

**SEND \$2.95**

Postpaid

Box CC 1904  
Chattanooga, Tenn.

## WILD HORSEPOWER

may be beautiful on  
the loose, but  
**Speed with Control**  
**is the Grant way to**  
**greater horsepower**  
**in your engine**

**THE WORLD'S BEST  
OIL CONTROL PISTON RING.**

Dealer information  
furnished on  
request.

**Grant**  
**PISTON RINGS**

Grant and Grant, 241 N. Westmoreland Ave., Los Angeles 4, Calif.

Send me GRANT'S helpful new article on preparing the  
engine for Re-Ringing. *It's Free.*

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_



